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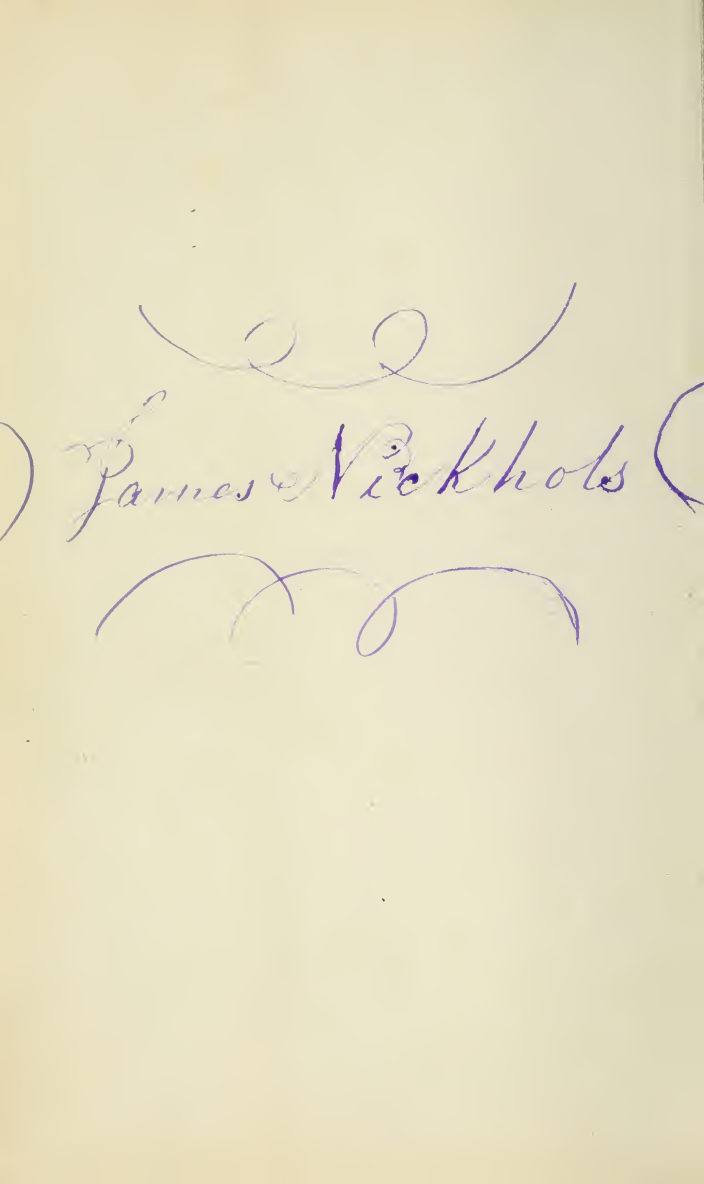
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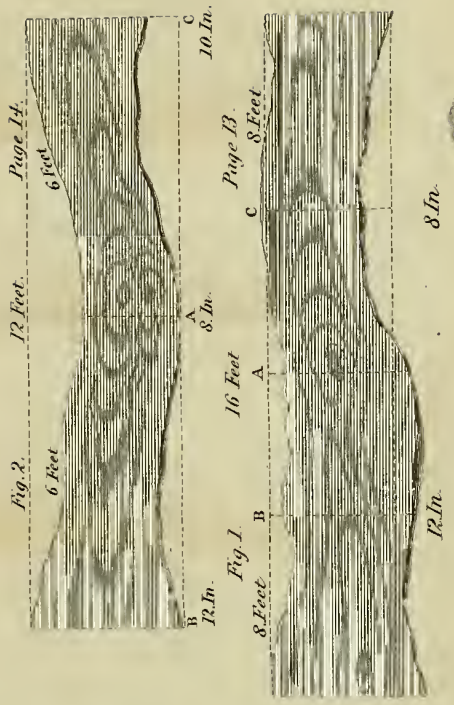

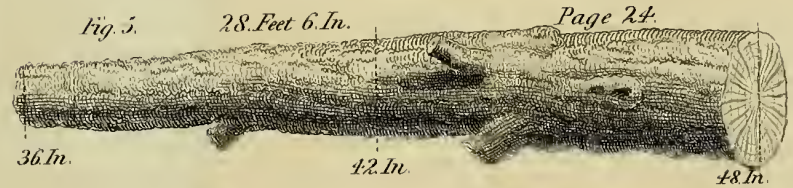

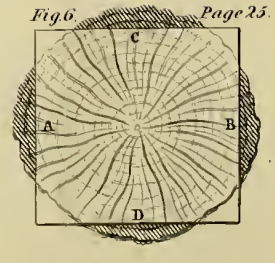

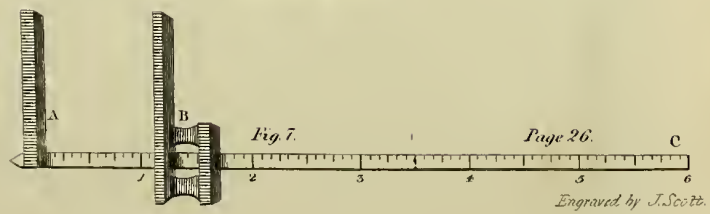

Fig. 7. Page 26.

Engraved by J. Scott.

Blackie & Son, Glasgow, Edinburgh & London

THE

PRACTICAL MEASURER,

OR

TRADESMAN AND WOOD MERCHANT'S ASSISTANT;

A SERIES OF TABLES,

DESIGNED FOR THE USE OF

WOOD MERCHANTS, BUILDERS, CARPENTERS, JOINERS, SAWYERS, PLASTERERS, PAINTERS, GLAZIERS, MASONS, BRICKLAYERS, &c.

BY

ALEXANDER PEDDIE.

NEW EDITION, WITH ADDITIONAL TABLES.

LONDON:
BLACKIE AND SON, PATERNOSTER ROW;
GLASGOW AND EDINBURGH.

MDCCCLXV.

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VILLAFIELD.

PREFACE.

Amongst the works devoted to the assistance of Artificers and Tradesmen, Peddie's Practical Measurer has long held a distinguished place, both for its comprehensive character, and the accuracy of its calculations. It is therefore unnecessary, in introducing a New and Enlarged Edition of this work, to insist on the merits of the original, as these are universally admitted. However, it may be proper to notice briefly wherein the present edition differs from those which have preceded it.

It is only after a work of this nature has been thoroughly tested and extensively used by practical men, that its entire suitableness can be ascertained, and the necessity for modification or extension of plan determined. It is not surprising, therefore, that in the interval of twenty years which have passed since its first publication, suggestions should have been made for the improvement of the work. Acting upon the occasional hints which have been given, and with a view to adapt the book to the present requirements of the Artificer and Tradesman, the Editor of this edition has studied to avail himself of every means for adding to its utility.

Extensive additions have been made to the former Tables, and the whole revised with much care. No fewer than 23 pages have been added to the table of Superficial Measure, and 21 pages to the table of Solid Measure, whilst some of the others have been extended to twice their former length, and all of them enlarged; also several additional lines or dimensions have been added to each page.

The new matter, occupying above 130 pages of the remainder of the work, embraces several useful Tables, together with much valuable information. A Table has been given expressly for the use of Glaziers, and also a companion Table, showing the value of squares of glass at any given rate. Tables have likewise been constructed for calculating Sawyers' work, at all the prices presently paid. The Tables are preceded by explanations and illustrative examples fully elucidating their use.

Besides the additions that have been made to the Tabular department of the book, an Appendix of considerable extent has been added, which includes, in a compendious form, the most approved rules for working by Duodecimals or Cross Multiplication; Vulgar and Decimal Fractions; and for the Extraction of the Square and Cube Roots. There are also added a Treatise on the Mensuration of Superficies and Solids, illustrated with Diagrams and Examples; and a short Treatise on Land Measuring, with examples of Plotting and calculating contents.

Such, in brief, are the characteristic features of this new edition of the PRACTICAL MEASURER, which, it is hoped, will recommend itself favourably to the Timber Merchant, Mechanic, Engineer, and Contractor, and to all Tradesmen who require a Tabular Assistant for the calculation of their work; and in the absence of more extensive treatises, it will be useful as a book of reference to the Arithmetician and Geometer.

D. B.

GLASGOW, *September*, 1842.

Tables XV. and XVIII. have been calculated specially for the present Edition of this Work. Table XIV. has been extended from 100 to 120; and several typographical errors, which had escaped notice in former Editions, have been corrected.

D. B.

April, 1852.

To maintain the value of the PRACTICAL MEASURER as a work of reference, several of the Tables have been amended, so as to make them available for changes in calculations caused by alterations in the prices of workmanship, and in the cost of goods, the latter consequent upon the abolition of the Excise Duties. More particularly there has been added, in a second Appendix, a series of Tables for facilitating calculations of Timber in Deals and Battens, including not only the ordinary standard sizes, but all the various scantlings usually imported; and also for estimating the price of Boards of various thickness, and other purposes. The work now presents the most extensive and complete set of Tables of the kind that is in the market, and contains information only to be elsewhere obtained from several books. D. B.

September, 1862.

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THE

PRACTICAL MEASURER.

Explanation of the Arithmetical Signs or Characters used in this Work.

$=$ The sign of equality, as 12 inches $=$ 1 foot.

$+$ The sign of addition, as $8 + 4 = 12$.

$-$ The sign of subtraction, as $12 - 8 = 4$.

$\times$ The sign of multiplication, as $8 \times 4 = 32$.

$\div$ The sign of division, as $32 \div 8 = 4$.

Or, the dividend may be placed above the divisor, with a line between them, as $\frac{32}{8} = 4$.

: :: : The sign of proportion, 4 : 8 :: 16 : 32; that is, as 4 is to 8, so is 16 to 32.

$\surd$ The sign of the square root, as $\surd 144 = 12$.

To denote that the square of a number is to be taken, or that the number is to be multiplied into itself, a small figure 2 is placed above it to the right, as $12^2 = 12 \times 12 = 144$.

$\sqrt[3]{}$ The sign of the cube root, as $\sqrt[3]{1728} = 12$.

To show that the cube of a number is to be taken, or that the number is first to be multiplied into itself, and that product to be again multiplied by the number, a small figure 3 is placed above it to the right, thus, $12^3 = 12 \times 12 = 144 \times 12 = 1728$.

A line or bar placed over two, three, or more numbers, signifies that they are to be taken together, as $\overline{3 \times 9 + 6} \times 8 = 264$, shows that 3 is to be multiplied by $9 = 27$, 6 added to the product $= 33$, and that sum multiplied by 8

$= 264$. $\overline{3\times 9} + \overline{6\times 8} = 75$, shows that 3 is to be multiplied by $9 = 27$, and 6 multiplied by $8 = 48$, and the two products to be added together $= 75$.

$\sqrt{\overline{10^2 - 6^2}} = 8$, shows that $6^2 = 36$ is to be subtracted from $10^2 = 100 = 64$, and the square root of that extracted $= 8$.

$\sqrt[3]{\frac{\overline{25\times 24}}{4}} = 5$, shows that 25 is to be multiplied by 24 $= 600$, that sum to be divided by $4 = 125$, and the cube root of that extracted $= 5$.

TABLES OF IMPERIAL MEASURES.

LONG OR LINEAL MEASURE.

12 lines	=	1 inch.	
12 inches	=	1 foot.	
3 feet	=	1 yard.	
$5\frac{1}{2}$ yards	=	1 pole.	
40 poles	=	1 furlong	= 220 yards.
8 furlongs	=	1 mile	= 1760 yards.

SQUARE OR SUPERFICIAL MEASURE.

144 square inches	=	1 square foot.
9 square feet	=	1 square yard.
$30\frac{1}{4}$ square yards	=	1 square pole.
40 square poles	=	1 rood.
4 roods	=	1 acre = 4840 sq. yards.

CUBIC OR SOLID MEASURE.

1728 cubic inches	=	1 cubic foot.
27 cubic feet	=	1 cubic yard.

MEASURE OF CAPACITY.

1 gill	———	= 8.6648125	cub. in. =	5 oz. water
4 gills	= 1 pint	= 34.65925	" =	$1\frac{1}{4}$ lbs. "
2 pints	= 1 quart	= 69.3185	" =	$2\frac{1}{2}$ " "
4 quarts	= 1 gallon	= 277.274	" =	10 " "
2 gallons	= 1 peck	= 554.548	" =	20 " "
4 pecks	= 1 bushel	= 2218.192	" =	80 " "
8 bushels	= 1 quarter	= 17745.536	" =	640 " "

4 quarters = 1 chaldron, and 10 quarters = 1 last.

1 bushel ground malt = 2273.461 cubic inches.

TABLE OF THE CUBIC INCHES IN THE OLD MEASURES.

Cubic Inches.	
231.	= 1 English gallon of wine, spirits, oil, &c.
282.	= 1 English gallon of beer or ale.
268.8	= 1 English corn gallon.
2150.42	= 1 Winchester bushel.
2204.	= 1 bushel ground malt.
833.6272	= 1 Scotch gallon for all liquids.
2214.322	= 1 Scotch firlot wheat, pease, rye, and salt.
3230.305	= 1 Scotch firlot barley, oats, and malt.
217.6	= 1 Irish liquid gallon.
272.25	= 1 Irish gallon of corn or malt.

TABLE OF THE CUBIC INCHES IN A POUND WEIGHT OF THE FOLLOWING.

10.56	cubic inches	= 1	pound of flint glass.
12.18	"	= 1	" green glass.
14.06	"	= 1	" white glass.
27.14	"	= 1	" hard soap, cold.
28.	"	= 1	" ———, hot.
25.56	"	= 1	" white soft soap.
25.67	"	= 1	" green soft soap.
30.28	"	= 1	" tallow gross.
34.8	"	= 1	" green starch.
40.3	"	= 1	" dry starch.

MISCELLANEOUS TABLE.

A barrel bulk is 5 cubic feet.
— ton of shipping is 42 cubic feet.
— load of unhewed timber is 40 cubic feet.
— load of squared timber is 50 cubic feet.
— load of 1 inch plank is 600 square feet.
— load of 1½ inch plank is 400 square feet.
— load of 2 inch plank is 300 square feet.
— load of 2½ inch plank is 240 square feet.
— load of 3 inch plank is 200 square feet.
— load of 3½ inch plank is 170 square feet.
— load of 4 inch plank is 150 square feet.
— load of bricks is 500.
— load of tiles is 1000.
— load of lime is 32 bushels.
— load of sand is 36 bushels.
— hundred of deals is 120.
— hundred of nails is 120.
— thousand of nails is 1200.
— ton of iron is 2240 pounds weight.
— fodder of lead is 19½ cwt. or 2184 pounds.
— hundred of lead is 112 pounds.
— stone of glass is 5 pounds.
— seam of glass is 24 stones.
— square of flooring is 100 feet.
— rood of building is 36 square yards.
— palm is 3 inches.
— hand is 4 inches.
— span is 9 inches.
— cubit is 1½ foot.
— fathom is 6 feet or 2 yards.
— military pace is 2½ feet.
— geometrical pace is 5 feet.
An ell English, is 1¼ yard or 45 inches.
— ell Scotch, is 37.0598 inches.
A pole, perch, or rod is 16½ feet.
— fen or woodland pole or rod is 18 feet.

A forest pole is 21 feet.
— square pole or rod, is 272¼ square feet.
— chain is 4 poles, or rods, or 22 yards, and consists of 100 links, each $\frac{22}{100}$ of a yard, or 7.92 inches long.
An English acre is 4840 square yards, or 10 square chains, or 100,000 square links.
A Scotch acre is 5760 square ells, or 6104.128 square yds.
An Irish acre is 7840 sq. yds.; an Irish perch or pole, 7 yds.
— yard of land is 30 acres.
— hide of land is 100 acres.
— furlong is 40 poles.
An English mile is 1760 yards.
A Scotch mile is 1976½ yards.
An Irish mile is 2240 yards.
A geographical or nautical mile is 2025⅓ yards.
— league is 3 nautical miles.
— degree is 60 nautical miles, or 69⅛ English miles nearly.
Mean circumference of the earth, 131239680 feet.

Mean diameter of	do.	41775360 feet.
Mean radius of	do.	20887680 feet.
Radius of the equator,		20921180 feet.
Polar semi-axis,		20853180 feet.

In the construction of the Tables in this Work, the foot is divided into inches parts &c., thus:

12 thirds	=	1 second.
12 seconds	=	1 part.
12 parts	=	1 inch.
12 inches	=	1 foot.

The foot rules generally used by tradesmen have the inch divided into eight parts. It would, however, be more convenient if the inch upon rules was divided into twelve parts, which would enable the workman to take measures to a greater degree of minuteness and accuracy. Some rules have the inch divided decimally, or into tenth parts, which is necessary for some purposes.

The following tables will be found useful in comparing the divisions of the different foot rules with the divisions used throughout this work.

Division of the common rules, or the inch into eighths.

2 eighths = $\frac{1}{4}$ inch.
4 eighths = $\frac{1}{2}$ inch.
6 eighths = $\frac{3}{4}$ inch.
8 eighths = 1 inch.

The inch divided into tenth parts.

$1\frac{1}{4}$ tenths, or .125 = $\frac{1}{8}$ inch.
$2\frac{1}{2}$ tenths, or .25 = $\frac{1}{4}$ inch.
5 tenths, or .5 = $\frac{1}{2}$ inch.
$7\frac{1}{2}$ tenths, or .75 = $\frac{3}{4}$ inch.
10 tenths = 1 inch.

The inch divided into twelfth parts.

$1\frac{1}{2}$ twelfths = $\frac{1}{8}$ inch.
3 twelfths = $\frac{1}{4}$ inch.
6 twelfths = $\frac{1}{2}$ inch.
9 twelfths = $\frac{3}{4}$ inch.
12 twelfths = 1 inch.

Note 1.—In practice it is generally considered unnecessary to take more minute measures than parts or twelfths of an inch.

2. Lineal measure respects length only; superficial measure includes length and breadth; solid measure comprehends length, breadth, and depth, or thickness.

3. In the tables, a foot superficial measure denotes a square, of which the side is 12 inches, having no regard to thickness, and may be conceived to be formed of 12 pieces, each an inch broad, and 12 inches long, placed together; thus any given number of these pieces will denote so many superficial inches; and these 12 may be supposed to be divided further, each into 12 pieces, $\frac{1}{12}$ of an inch broad, and a foot long, or superficial parts, &c.

In like manner a cubical or solid foot is a cube, of which the side is 12 inches, and may be considered as composed of 12 squares or slices, each 12 inches the side of the square, and an inch thick, placed one above another; any given number of these squares or slices denoting as many cubical or solid inches; and these slices may be conceived to be again divided, each into 12 slices, $\frac{1}{12}$ of an inch thick, and a foot square, denoting cubic or solid parts, &c.

DIRECTIONS FOR MEASURING VARIOUS KINDS OF WORK.

MASON WORK.

To Masonry belongs all sorts of stone-work, whether hewn, pavement, rubble, causewaying, &c.

Rubble work is sometimes estimated by the rood of 63 square feet, that is, 21 feet long, and 3 feet high; and sometimes by the rood of 36 square yards, that is, 36 yards long, and 1 high. The standard thickness for stone walls is 2 feet; and walls of any other thickness must be reduced to that standard.

Hewn work is generally measured by the square or superficial foot. The dimensions are taken by a measuring line, which is bent into all the hollows, into the mouldings, and over all the places that are projected, so that every part of the surface may be ascertained with accuracy that has been touched by the irons.

Arched or circular work is estimated at double measure. Deductions are made with regard to materials for all vacancies, such as doors, windows, presses, &c.; but no deductions are made with regard to work.

Digging for foundations, &c. is estimated by the cubic or solid yard. Marble blocks, columns, &c. are estimated by the solid foot. Chimney-pieces, slabs, and marble facings, by the superficial or square foot.

Note.—Chimney-shafts are estimated two ways, viz., some allow double work, and some take the dimensions by multiplying one half the girt by the height.

CARPENTER WORK.

The parts necessary to be measured of Carpenter work consist chiefly in flooring, roofing, partitioning, fronts, and walls of timber buildings, &c. which are generally measured by the square yard, or by the square of 100 feet.

Door and window shutters are sometimes reckoned work and half work. If a door be moulded on both sides, and finished off in a superior style, it is estimated at double work, and charged accordingly. In measuring of roofs, no deductions are made for sky-lights or holes for chimney stalks.

In measuring stairs, add the breadth and depth of all the steps together, and multiply the product by the width of a step; the last product is the area, or superficial content.

Note.—Window-frames, cornices, lintels, skirt-boards, &c., are measured and charged by the lineal foot.

BRICKLAYER WORK.

In Scotland brickwork is generally estimated by the square yard; in England by the square rod of 272¼ square feet, the side of the square being 16½ feet in length. The standard thickness of brick walls is 1½ brick, or the length of one brick and the breadth of another; and walls of any other thickness may be reduced to that standard by the following rule.

Rule.—Multiply the superficial content of the wall by the number of half bricks in the thickness, and divide the product by three: the quotient will be the standard thickness.

SLATER AND TILER WORK.

The superficial content of a roof is found by multiplying the length of the ridge by the girt taken over the top of the house from eave to eave, making an allowance of double or treble measure for the double or treble row of slates at the bottom. The content of roofs is estimated by the square of 100 feet.

Note.—There are seldom any deductions made for chimney-stalks or small window holes.

SAWYER WORK.

Sawyers measure their work by the superficial or square foot; and in some places are paid at the rate of so much per foot, and in other places by the 100 feet; and deals are sometimes paid at so much per dozen, according to their length.

PAINTER WORK.

Painters charge by the square yard, at a certain rate for one, two, or three coatings, and measure every way over the mouldings wherever the brushes have touched, and calculate the content as directed in superficial measure.

GLAZIER WORK.

Glaziers estimate their work by the square or superficial foot, and charge accordingly.

Panes of round or oval forms are measured as if rectangular, taking their greatest length and breadth, on account of the waste in cutting the glass.

PLASTER WORK.

The content of plaster work is estimated either by the foot or yard, or square of 100 feet. Enriched mouldings, &c., are rated by running or lineal measure.

Deductions are made for chimneys, doors, &c. Windows are sometimes not deducted, as the plastered returns at the top and sides are allowed to compensate for the opening.

PLUMBER WORK.

Plumber work is usually charged by the pound or hundred weight. Sheet-lead for roofing, &c., weighs from 7 to 12 lb. per square foot. Lead pipes of $\frac{3}{4}$ inch bore, weigh about 10 lb.; of 1 inch bore, 12 lb.; of $1\frac{1}{4}$ inch bore, 16 lb.; of $1\frac{1}{2}$ inch bore, 18 lb.; of $1\frac{3}{4}$ inch bore, 21 lb.; and of 2 inches bore, 24 lb. per yard in length.

PAVIER WORK.

Paving is charged by the square yard. The content is found by multiplying the length by the breadth.

DITCHING.

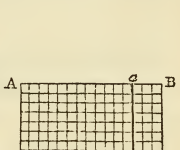
Ditching is estimated by the cubic or solid yard.

REMARKS ON TAKING DIMENSIONS, AND RULES FOR CALCULATING THE CONTENT OF PLANKS, TREES, STONES, DITCHES, &c.

The superficial content of a square is found by multiplying the side of a square into itself; the product is the superficial content or area in squares of the same name in which the lineal dimensions are taken; or if the operation is performed by cross multiplication, the content will be given in square feet, inches, &c.

EXAMPLE.

Required the superficial content of a square board, ABCD, the side of which is 15 inches?



15 × 15 = 225, the number of squares of 1 inch each in the board.

By cross multiplication.

ft.	in.	
1	3	
1	3	
1	3	
	3	9
1	6	9

or 1 foot, 6 inches, and 9 parts, the superficial content.

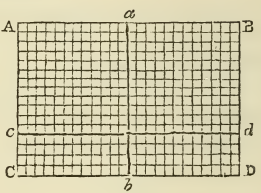
By inspecting the figure, the correctness of these calculations will be obvious. In the first place, it will be seen that the figure is divided by the perpendicular and horizontal lines, into 15 rows of spaces, 15 in every row, each space representing 1 inch, the sum of the whole being 225. It will also be perceived that the figure is divided into four portions, by the dark lines *a b*, *c d*, intersecting each other. The portion *a* A *c*, contains 12 rows of 12 each, or 144 = 1 foot, and as the inch superficial is the twelfth part of a foot, each row of twelve spaces will therefore be an inch; the portions *a* B *d* and *c* C *b* contain each 3 rows of 12 each = 6 inches, and as a *part* is the twelfth of an inch,

each space is therefore equal to a *part;* and the remaining portion *b* D *d*, containing 3 rows of 3 each = 9 *parts*, or $\frac{9}{12}$ of an inch; and the whole being added together, make 1 foot, 6 inches, and 9 parts, as before.

To find the superficial content of an oblong rectangular figure or parallelogram. Multiply the length by the breadth; the product is the superficial content in squares of the same name in which the lineal dimensions are taken.

EXAMPLE.

Required the superficial content of the parallelogram ABCD, whose length is 24 inches, and breadth 16 inches?



24 × 16 = 384 squares of 1 inch each in the parallelogram.

By cross multiplication.

ft.	in.	
1	4	breadth.
2	0	length.
2	8	or 2 feet 8 inches, the superficial content.

As in the last problem, the figure is divided into spaces, each representing 1 inch square, and further into four portions by the dark lines *a b*, *c d*. The portions *a* A *c* and *a* B *d* contain each 12 rows of spaces, 12 in each, equal twice 144 = 2 feet; and the portions *c* C *b* and *b* D *d* contain each 4 rows of 12 of spaces, 12 in each = 8 inches, the whole being 2 feet 8 inches, as above.

The superficial content of any board, deal, plank, &c., is found by this rule.

EXAMPLE.

Required the superficial content of a plank 25 feet long, and 15 inches broad?

ft.	in.	
25	0	length.
1	3	breadth.
25	0	
6	3	
31	3	or 31 feet 3 inches, the superficial content.

If the one end is broader than the other, and the plank tapers gradually, add the breadths of the two ends together; this sum divided by 2, and the length multiplied by the quotient, will give the superficial content.

EXAMPLE.

Required the superficial content of a plank 14 feet long, whose breadth at one end is 19 inches, and tapers away to 13 inches at the other?

$19 + 13 = 32 \div 2 = 16$ inches, the mean breadth.

ft.	in.	
14	0	length.
1	4	mean breadth.
14	0	
4	8	
18	8	or 18 feet 8 inches, the superficial content.

If the plank to be measured is irregularly shaped, as shown in the plate figures 1 and 2, to measure these and others of the like kind, the breadth must be taken at two or three places, and added together, and this sum is to be divided by the number of dimensions taken, for the mean breadth; the quotient multiplied by the length gives the content.

EXAMPLE.

1. Required the superficial content of a plank of the form of fig. 1, (see plate,) whose length is 16 feet, breadth at B 12 inches, and at C 8 inches?

$12 + 8 = 20 \div 2 = 10$ inches, the mean breadth.

ft.	in.	
16	0	length.
	10	mean breadth.

13 4 or 13 feet 4 inches, the superficial content.

Or the portions into which the plank is divided at A, might have been calculated separately, by multiplying each length by its own breadth, and the content thus found added together, thus:

ft.		ft.	in.	
8	length of one end	8	0	length of other end.
1	breadth at B.	0	8	breadth at C.
8	content.	5	4	content.

And these added together, make 13 feet 4 inches, as above.

2. Required the superficial content of a plank of the form of fig. 2, whose length is 12 feet, the half AB measuring 12 inches in breadth at the one end, and 8 inches at the other; and the half AC measuring 10 inches in breadth at the one end, and 8 inches at the other?

$12 + 8 = 20 \div 2 = 10$ inches, mean breadth of AB.

ft.	in.	
then 6	0	length of AB.
0	10	mean breadth.

5 0 or 5 feet, the content of AB.

and $10 + 8 = 18 \div 2 = 9$ inches, mean breadth of AC.

ft.	in.	
6	0	length of AC.
0	9	mean breadth.

4 6 or 4 feet 6 inches, the content of AC.

And 5 feet added to 4 feet 6 inches = 9 feet 6 inches, the superficial content of the whole plank.

Or, as the plank is divided into equal lengths at A, the breadths at B and C might have been added to twice the breadth at A, and divided by 4 the number of dimensions

for the mean breadth, which, multiplied by the length, would give the content, thus:

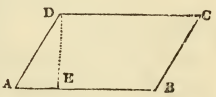
$12 + 8 + 8 + 10 = 38 \div 4 = 9\frac{1}{2}$ inches, the mean breadth.

ft.	in.	pts.	
12	0	0	length.
	9	6	mean breadth.
9	0	0	
	6	0	
9	6	0	or 9 feet 6 inches, the content, as before.

To measure a four-sided figure, suppose the end of a stone, ABCD, which has its opposite sides equal and parallel, but is not right angled. Apply a square to the side AB, and move it along until it cuts the opposite angle at D; or which is the same thing, from the angle at D let fall the perpendicular DE upon the line AB, then multiply the length of the line DE, so found, by the side AB or DC, the product is the superficial content or area.

EXAMPLE.

Required the superficial content of the figure ABCD, the length of AB or DC being 26 inches, and breadth from D to E 16 inches?

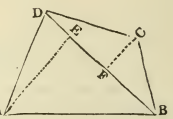


ft.	in.	
2	2	length.
1	4	breadth.
2	2	
	8	8
2	10	8 or 2 feet 10 inches and 8 parts, the superficial content.

To measure a four-sided figure, whose sides are not parallel, such as ABCD, draw a line DB joining its two opposite angles, which divides it into two triangles. Ap-

ply a square to the line DB, and move it along until it cuts the angle at A, and draw the line AE; in the same manner with the square applied to DB, draw the line CF, which is in effect letting fall perpendiculars from A and C on the line DB. Multiply half the lengths of AE and CF by the length of DB; or multiply half the length of DB by the lengths of AE and CF, and the result is the superficial content.

EXAMPLE.



Required the superficial content of the figure ABCD, the length of the line DB being 28 inches, AE 16 inches, and CF 7 inches?

$16 + 7 = 23 \div 2 = 11\frac{1}{2}$ inches, half the length of the lines AE and DF.

ft.	in.	
2	4	length of DB.
	11 6	half the length of AE and CF.
2	1 8	
	1 2	
2	2 10	or 2 feet 2 inches and 10 parts, the superficial content.

Or, by the last mentioned method,

$16 + 7 = 23$ inches, the length of AE and CF; and $28 \div 2 = 14$ inches, half the length of DB.

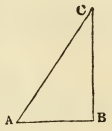
ft.	in.	
1	2	half the length DB.
1	11	lengths of AE and CF.
1	2	
1	0 10	
2	2 10	or 2 feet 2 inches and 10 parts, as before.

To measure the surface of a triangular figure ABC, when one of the angles is a right angle. Multiply the length of the base AB by half the length of the perpendicular

BC; or, multiply the perpendicular by half the base, the product is the superficial content or area.

EXAMPLE.

Required the superficial content of the figure ABC, the base AB being 12 inches, and the perpendicular BC 18 inches?



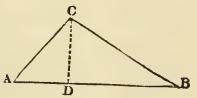
18 ÷ 2 = 9, half the perpendicular BC.

	ft.	in.	
and	1	0	the length of the base AB.,
multiplied by	0	9	half of the perpendicular.
gives	0	9	or 9 inches, the superficial content.

If a triangle, suppose ABC, is not right angled, apply a square to the longest side or base AB, and move it along until it cuts the opposite angle at C, and draw the line CD, or let fall a perpendicular CD from the angle at C upon the line AB. Multiply the length of the base AB, by half the length of the perpendicular CD so found; or, multiply the perpendicular by half the base, the product is the superficial content or area.

EXAMPLE.

Required the superficial content of the triangle ABC, the base AB being 20 inches long, and the perpendicular CD 8 inches?



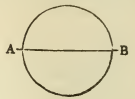
8 ÷ 2 = 4 half the length of the perpendicular CD.

	ft.	in.	
and	1	8	the length of the base AB.
multiplied by	0	4	half the length of the perpendicular CD.
gives	0	6	8 or 6 inches 8 parts, the superficial content.

To measure a circle, multiply the diameter by $\frac{1}{4}$ of the circumference; or, multiply the square of the diameter by the decimal .7854; the product is the superficial content or area.

EXAMPLE.

Required the superficial content of a circle ABCD, whose diameter AB is 7 inches, and circumference 22 inches?



$22 \div 4 = 5\frac{1}{2}$ inches, the fourth of the circumference.

	in.	pts.	
and	7	0	the diameter.
multiplied by	5	6	fourth of the circumference.
	2	11	
		3	6
	3	2	6

or 3 inches 2 parts and 6 seconds, the superficial content.

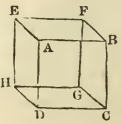
Or, by the other method,

$7^2 = 49 \times .7854 = 38.4846$ squares of 1 inch each. But as was formerly shown, 12 of these squares are equal to an inch, 38 is therefore equal to 3 inches and 2 parts. And multiplying the decimal by 12, we get 5.8152, which is very near 6 seconds, as in the preceding method. The small difference in the two results, arising from assuming 22 inches to be the circumference of a circle of 7 inches diameter, when the true circumference is only 21.991148. In practice, the circumference is frequently reckoned as 3 times the diameter, which may be considered sufficiently near the truth for measurements wherein great exactness is not required.

To find the solid content of a cube. Multiply the height of a side by itself, and that product again by the height of a side, which will give the solid content.

EXAMPLE.

Required the solid content of a cube ABCDEFGH, a side of which is 16 inches in height?

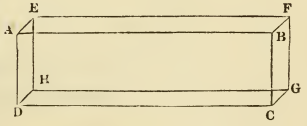


ft	in.	
1	4	height of a side.
1	4	multiplied by itself.
1	4	
	5	4
1	9	4
1	4	0 multiplied again by the height of a side.
1	9	4
	7	1 4
2	4	5 4 or 2 feet 4 inches 5 parts and 4 seconds, the solid content.

To find the solid content of an oblong rectangular solid. Multiply the breadth by the thickness, and that product by the length, which will give the solid content.

EXAMPLE.

Required the solid content of the oblong rectangular stone AB CDEFGH, whose height AD or EH is 18 inches, breadth AE or DH 15 inches, and length AB or EF 7 feet 6 inches?

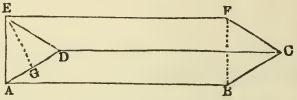


ft.	in.	
1	6	height.
1	3	breadth.
1	6	
	4	6
1	10	6 area of end.
7	6	length.
18	1	6
	11	3
14	0	9 or 14 feet and 9 parts, the solid content.

To find the solidity of any triangular stone, &c., whose sides are rectangular planes. Apply a square to one of the sides of the triangular end, move it along until it cuts the opposite angle, and draw a line. Multiply the length of the side by half the length of the line so found, which will give the area of the end; this multiplied by the length is the solid content.

EXAMPLE.

Required the solid content of a triangular stone ABCDEF, the length of which AB or DC is 6 feet, the side AD 21 inches, and the length of the line EG 19 inches?

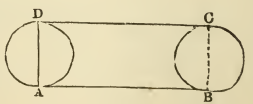


ft.	in.			
1	9			length of AD.
	9	6		half length of EG.
1	3	9		
		10	6	
1	4	7	6	area of the end ADE.
6				length of AB.
8	3	9	0	or 8 feet $3\frac{3}{4}$ inches the solid content.

To find the solid content of a cylinder. Multiply the area of the end or base by the altitude or length of the cylinder; the product is the solid content.

EXAMPLE.

Required the solid content of a cylinder ABCD, its diameter AD or BC being 26 inches, its circumference 82 inches, and its length AB or DC 5 feet 6 inches?



$82 \div 4 = 20\frac{1}{2}$ inches, fourth part of the circumference.

ft.	in.		
2	2		diameter.
1	8	6	fourth part of the circumference.
2	2		
1	5	4	
	1	1	
3	8	5	area of the end or base.
5	6		length.
18	6	1	
1	10	2	6
20	4	3	6 or 20 feet 4 inches 3 parts 6 seconds, the solid content.

To find the solid content of a cone or pyramid. Multiply the area of the base by $\frac{1}{3}$ of the altitude of the cone or pyramid, which will give the solid content.

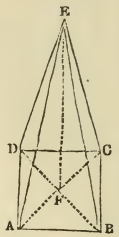
EXAMPLES.

1. Required the solid content of a cone ABC, whose diameter at the base AB is 16 inches, circumference 50 inches, and altitude CD 32?

$50 \div 4 = 12\frac{1}{2}$ inches, the fourth part of the circumference.

ft.	in.		
1	4		diameter.
1	0	6	fourth part of circumference.
1	4		
0	0	8	
1	4	8	
	10	8	a third of the height,
1	1	10	8
0	0	11	1 4
1	2	9	9 4 or 1 foot 2 inches 9 parts 9 seconds, and 4 thirds, the solid content.

2. Required the solid content of a square pyramid ABCDE, a side AB or BC of the base being 21 feet 6 inches, and height EF 45 feet?

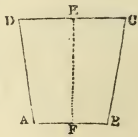


ft.	in.	
21	6	side AB squared.
21	6	
451	6	
10	9	
462	3	area of base.
15		a third of the altitude.
6933	9	or 6933 feet 9 inches, the solid content.

The solid content of ditching is found by adding together the widths at the top and bottom of the ditch, and dividing the sum by 2 for the mean width, which, multiplied by the depth, and the product again by the length of the ditch, gives the solid content.

EXAMPLE.

Required the cubic feet, yards, and roods, in a ditch 300 feet long, whose breadth at the bottom from A to B is 3 feet, at the top from D to C is 5 feet, and depth from E to F is $4\frac{1}{2}$ feet?



$5 + 3 = 8 \div 2 = 4$ feet mean breadth.

$4\frac{1}{2}$	depth.
18	area of the section ABCD.
300	length.
27)5400	cubic feet.
6)200	cubic yards.
$33\frac{1}{3}$	cubic roods.

The usual way of measuring round timber, is to girt the tree in the middle with a small cord, and after deducting from 2 to 4 inches as compensation for the bark, one-fourth of the remainder is considered the side of the square; or, the girt may be taken in two or more parts, and the sum of the girts divided by their number, and the quotient, after deducting for the bark, is to be taken for the side of the square; this multiplied into itself, and by the length of the tree, gives the solid content.

Note.—Timber under 6 inches diameter, is not taken into the measurement unless by special agreement.

EXAMPLES.

1. Required the solid content of a tree, (fig. 3.) 30 feet long and girt in the middle 3 feet 6 inches, allowance having been made for the bark?

ft.	in.		
4)3	6		
0	10	6	quarter girt, or side of the square.
0	10	6	multiplied into itself.
0	8	9	
0	0	5	3
0	9	2	3
30			multiplied by the length.
22	11	7	6 or 22 feet 11 inches 7 parts 6 seconds, the solid content.

2. Required the solid content of a tree, (fig. 4.) 25 feet long, and the girts at the two ends 32 and 56 inches?

ft.	in.	
2	8	} girts.
4	8	
2)7	4	sum of the girts.
4)3	8	mean girt.
0	11	quarter girt.
0	11	multiplied into itself.
0	10	1
25		multiplied by the length.
21	0	1 or 21 feet and 1 part, the solid content.

3. Required the content of a tree, (fig. 5.) 28 feet 6 inches long, the girt at three places being 36, 42, and 48 inches?

ft.	in.	
3	0	} girts.
3	6	
4	0	
3)10	6	sum of the girts.
4) 3	6	mean girt.
0	10	6 quarter girt.
0	10	6 multiplied into itself.
0	8	9
0	0	5 3
0	9	2 3
28	6	multiplied by the length.
21	5	3 0
0	4	7 1 6

21 9 10 1 6 or 21 feet 9 inches 10 parts 1 second 6 thirds, the solid content.

This way of calculating the content of round timber, gives the result less than the truth in the proportion of 11 to 14, or nearly one-fourth. No doubt a considerable part of what is under reckoned is lost in the squaring, and as the buyer and seller are both usually aware of the fact, the price is so arranged, that no great practical loss occurs to either party in following this long established custom.

If the nett quantity of timber in a round tree is wanted, the following rule, which gives only one foot in 190 more than the truth, may be followed.

Rule.—After deducting for the bark, multiply the square of $\frac{1}{5}$ of the mean girt by double the length of the tree, the product will be the content.

EXAMPLE.

Required the content of a round tree 40 feet long, and girt after deducting for the bark 40 inches?

ft.	in.	
5)3	4	girt.
0	8	= ⅕ of girt.
	8	multiplied into itself, or squared.
0	5	4
80		twice length of the tree.
35	6	8 nett solid content.

Had the content of the tree been calculated by taking 10 inches as the quarter girt, the content would have been found to be 27 feet 9 inches and 4 parts, being a deficiency by the usual method of 7 feet 9 inches and 4 parts.

Hewn timber is generally measured in the centre of the piece with a pair of callipers, and as the dimensions are taken from A to B, plate fig. 6, or from C to D, and reckoned the side of the square, it is evident that the buyer pays for the four angular parts that are wanting to complete the square. This is another old erroneous practice which it is not easy to get rid of.

When squared timber, &c., is unequal-sided, it must not be measured by taking the quarter girt as a mean side of the square, and multiplying it by the length for the solid content. This in all cases gives the content too much, and the greater the difference between the sides, the greater the error. In order to demonstrate this, let us suppose a square log 12 feet long, the side of the square being 12 inches, to be slit exactly down the centre, we would then have two pieces, each 12 inches broad and 6 inches deep. The girt of one of these would be 36 inches, and the quarter girt 9 inches, which multiplied by the length 12 feet, would give the solid content 6 feet 9 inches; and consequently the other half would be the same, giving the solid content

of the two 13 feet 6 inches. But if the log had been measured before being cut, the girt would have been 48 inches, and the quarter girt 12 inches, which, multiplied by the length 12 feet, would give 12 solid feet the true content; thus showing that timber only which is exactly square can be truly measured, by taking the quarter girt as the side of the square, and as already observed, the error increases in proportion as the breadth exceeds the depth or thickness. (See the explanation of Table II. for finding the true side of the mean square.)

In the freighting of ships, packing of stores, &c., the cubic content of the hold or storehouse must be taken, and also the content of the goods, the content of each cask, package, chest, &c., being taken separately, and added together, making an allowance from the whole for loss of room in packing.

Fig. 7 in the plate is a representation of a sliding guage, which is a convenient and expeditious instrument for taking dimensions of packages of any description. AC is the stock or standard, which may be 7 feet long, and is divided into feet and inches. A is the head of the guage, and is made fast on the end of the standard, and B is the dog-head which slides backward and forward upon it. To use it, the head A is placed on one side of the package, the dog-head B is pushed along until it is stopped by the other side, and the length or breadth of the package is at once seen on the standard. The dog-head must be well fitted on the standard to keep it from shaking as it moves along, and a little soap or grease will be necessary to make it slide easily.

EXAMPLE.

Suppose a vessel's hold to be 100 feet long, 32 feet wide, and 10 feet deep, how many solid feet and barrel-bulk of goods will it contain?

feet.
32 width.
10 depth.

320
100 length.

5)32000 solid feet.

6400 barrel-bulk.

It is hoped the foregoing remarks and examples will be useful to the young measurer in taking dimensions, and making calculations therefrom; and will enable him the more readily to understand and apply the tables to practice. Only a few of the more commonly occurring figures have been noticed in this place; but in the treatise on Mensuration at the end of the work, rules and examples will be given of measuring many forms of surface and solidity, which have not been alluded to in these remarks.

TABLE I.

SUPERFICIAL MEASURE.

This table shows the superficial content or measure of boards, deals, planks, flag-stones, paving, plastering, painting, glazing, sawing, area of land, &c., from $\frac{1}{4}$ inch, to 60 feet broad; and from $\frac{1}{4}$ inch to 75 feet long.

In the breadth, the table rises by quarter inches, to 3 feet; by feet, from 3 to 24 feet; and by 3 feet or a yard, from 24 to 60 feet. In the length, the table rises by quarter inches to 1 inch, then by inches to 1 foot, by feet to 25 feet; after which, follow 50 and 75 feet; by which means, with only one addition, the content of any measure from 1 foot to 125 feet in length will be obtained. As inches in the length are not frequently in use, they are placed at the bottom of the page.

Each page contains three several breadths, rising in regular order; and under each breadth, on the top of the columns, stand Ft. In. Pts. 2nds. which signify feet, inches, parts, seconds. In the under part of the table, on the top of the columns, from $\frac{1}{4}$ inch to 13 inches, are placed In. Pts. 2nds. 3ds. after which, as a column is required for feet, the 3ds. are left out. On the left of the page is the column containing the various lengths, opposite any of which, under the required breadth on the page, is the content at that length and breadth.

Suppose you wish to know the superficial content of a board, piece of paving, plastering, &c., look on the top of the pages for the breadth, and under that breadth, opposite the length, is the superficial content required.

EXAMPLES.

1. Required the superficial content of a board $8\frac{1}{2}$ inches broad, and 15 feet long?

Look on the top of the pages for $8\frac{1}{2}$ inches, and opposite 15 feet the length, under that breadth is 10 feet 7 inches and 6 parts, the superficial content.

2. Required the superficial content of a plank $14\frac{1}{2}$ inches broad, by $16\frac{1}{2}$ feet long?

Having found $14\frac{1}{2}$ inches, the breadth on the top of the page, opposite 16 feet and under that breadth is and opposite 6 inches, in the under part of the table is . . . .

	ft.	in.	pts.
	19	4	0
	0	7	3
	19	11	3

or 19 feet 11 inches 3 parts, the superficial content.

3. Required the superficial content of a table $23\frac{3}{4}$ inches broad, and 2 feet $11\frac{3}{4}$ inches long?

Opposite 2 feet in the column of length, and under $23\frac{3}{4}$ inches in breadth stands . . opposite 11 inches under that breadth is and opposite $\frac{3}{4}$ inch is . .

	ft.	in.	pts.	2ds.
	3	11	6	0
	1	9	9	3
	0	1	5	9
	5	10	9	0

or 5 feet 10 inches and 9 parts, the superficial content.

4. Required the superficial content of a deal, the breadth of which at one end is 15 inches, at the other 22 inches, and its length 39 feet?

$15 + 22 = 37$, and 37 divided by 2 gives $18\frac{1}{2}$ inches, the mean breadth, which look for on the top of the pages.

As 39, the length, is not to be found in the table, it must be taken out in two portions, and the contents added. And for this purpose, we may either take 25 and 14, or 20 and 19, both of which make 39; the last is the best way as it is not necessary to set them down on paper, but they may be added from the book. Thus, under $18\frac{1}{2}$ inches,

	ft.	in.	pts.
and opposite 19 feet is . . .	29	3	6
and opposite 20 feet is . . .	30	10	0
	60	1	6

or 60 feet 1 inch 6 parts, the superficial content.

5. In a window of 12 panes, each 9 inches by 11, how many square feet of glass are there?

Multiply the number of panes by the length of one, and under 9 inches and opposite the length, is the superficial content.

12 × 11 = 132 inches = 11 feet, and under 9 inches and opposite 11 feet, is 8 feet 3 inches, the superficial content.

6. A log 14 feet long is sawn into 9 planks, whose breadths are throughout 11 inches, how many square feet of sawing do they contain?

The saw having passed through the log 8 times, multiply the breadth by 8; thus,

11 × 8 = 88 = 7 feet 4 inches, the breadth of all the sawing.

	ft.	in.
then under 7 feet and opposite 14 feet in the table is	98	0
and under 4 inches and opposite 14 feet in the table is	4	8
	102	8

Or, find the content of one plank, and multiply it by 8; thus

	ft.	in.
under 11 inches and opposite 14 feet in the table is	12	10
which multiplied by . . .		8
gives as before, ...	102	8

or 102 feet 8 inches of sawing in the log.

7. A court is 98 feet long, by 54 feet broad, how many square yards does it contain?

Now as we cannot get 98 feet in one sum in the tables divide it into two, viz., 75 and 23.

	ft.
Then under 54 feet and opposite 75 is . .	4050
and under 54 feet and opposite 23 is . .	1242
which divide by the square feet in a yard = 9)	5292
gives	588

or 588 square yards in the court.

Feet Long.	¼ Inch broad.				⅓ Inch broad.				⅜ Inch broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	0	3	0	0	0	6	0	0	0	9	0
2	0	0	6	0	0	1	0	0	0	1	6	0
3	0	0	9	0	0	1	6	0	0	2	3	0
4	0	1	0	0	0	2	0	0	0	3	0	0
5	0	1	3	0	0	2	6	0	0	3	9	0
6	0	1	6	0	0	3	0	0	0	4	6	0
7	0	1	9	0	0	3	6	0	0	5	3	0
8	0	2	0	0	0	4	0	0	0	6	0	0
9	0	2	3	0	0	4	6	0	0	6	9	0
10	0	2	6	0	0	5	0	0	0	7	6	0
11	0	2	9	0	0	5	6	0	0	8	3	0
12	0	3	0	0	0	6	0	0	0	9	0	0
13	0	3	3	0	0	6	6	0	0	9	9	0
14	0	3	6	0	0	7	0	0	0	10	6	0
15	0	3	9	0	0	7	6	0	0	11	3	0
16	0	4	0	0	0	8	0	0	1	0	0	0
17	0	4	3	0	0	8	6	0	1	0	9	0
18	0	4	6	0	0	9	0	0	1	1	6	0
19	0	4	9	0	0	9	6	0	1	2	3	0
20	0	5	0	0	0	10	0	0	1	3	0	0
21	0	5	3	0	0	10	6	0	1	3	9	0
22	0	5	6	0	0	11	0	0	1	4	6	0
23	0	5	9	0	0	11	6	0	1	5	3	0
24	0	6	0	0	1	0	0	0	1	6	0	0
25	0	6	3	0	1	0	6	0	1	6	9	0
50	1	0	6	0	2	1	0	0	3	1	6	0
75	1	6	9	0	3	1	6	0	4	8	3	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	0	0	9	0	0	1	6	0	0	2	3
½	0	0	1	6	0	0	3	0	0	0	4	6
¾	0	0	2	3	0	0	4	6	0	0	6	9
1	0	0	3	0	0	0	6	0	0	0	9	0
2	0	0	6	0	0	1	0	0	0	1	6	0
3	0	0	9	0	0	1	6	0	0	2	3	0
4	0	1	0	0	0	2	0	0	0	3	0	0
5	0	1	3	0	0	2	6	0	0	3	9	0
6	0	1	6	0	0	3	0	0	0	4	6	0
7	0	1	9	0	0	3	6	0	0	5	3	0
8	0	2	0	0	0	4	0	0	0	6	0	0
9	0	2	3	0	0	4	6	0	0	6	9	0
10	0	2	6	0	0	5	0	0	0	7	6	0
11	0	2	9	0	0	5	6	0	0	8	3	0

Feet Long.	1 Inch broad.				1¼ Inch broad.				1½ Inch broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	1	0	0	0	1	3	0	0	1	6	0
2	0	2	0	0	0	2	6	0	0	3	0	0
3	0	3	0	0	0	3	9	0	0	4	6	0
4	0	4	0	0	0	5	0	0	0	6	0	0
5	0	5	0	0	0	6	3	0	0	7	6	0
6	0	6	0	0	0	7	6	0	0	9	0	0
7	0	7	0	0	0	8	9	0	0	10	6	0
8	0	8	0	0	0	10	0	0	1	0	0	0
9	0	9	0	0	0	11	3	0	1	1	6	0
10	0	10	0	0	1	0	6	0	1	3	0	0
11	0	11	0	0	1	1	9	0	1	4	6	0
12	1	0	0	0	1	3	0	0	1	6	0	0
13	1	1	0	0	1	4	3	0	1	7	6	0
14	1	2	0	0	1	5	6	0	1	9	0	0
15	1	3	0	0	1	6	9	0	1	10	6	0
16	1	4	0	0	1	8	0	0	2	0	0	0
17	1	5	0	0	1	9	3	0	2	1	6	0
18	1	6	0	0	1	10	6	0	2	3	0	0
19	1	7	0	0	1	11	9	0	2	4	6	0
20	1	8	0	0	2	1	0	0	2	6	0	0
21	1	9	0	0	2	2	3	0	2	7	6	0
22	1	10	0	0	2	3	6	0	2	9	0	0
23	1	11	0	0	2	4	9	0	2	10	6	0
24	2	0	0	0	2	6	0	0	3	0	0	0
25	2	1	0	0	2	7	3	0	3	1	6	0
50	4	2	0	0	5	2	6	0	6	3	0	0
75	6	3	0	0	7	9	9	0	9	4	6	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	0	3	0	0	0	3	9	0	0	4	6
½	0	0	6	0	0	0	7	6	0	0	9	0
¾	0	0	9	0	0	0	11	3	0	1	1	6
1	0	1	0	0	0	1	3	0	0	1	6	0
2	0	2	0	0	0	2	6	0	0	3	0	0
3	0	3	0	0	0	3	9	0	0	4	6	0
4	0	4	0	0	0	5	0	0	0	6	0	0
5	0	5	0	0	0	6	3	0	0	7	6	0
6	0	6	0	0	0	7	6	0	0	9	0	0
7	0	7	0	0	0	8	9	0	0	10	6	0
8	0	8	0	0	0	10	0	0	1	0	0	0
9	0	9	0	0	0	11	3	0	1	1	6	0
10	0	10	0	0	1	0	6	0	1	3	0	0
11	0	11	0	0	1	1	9	0	1	4	6	0

Feet Long.	1⅞ inch broad.				2 inches broad.				2¼ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	1	9	0	0	2	0	0	0	2	3	0
2	0	3	6	0	0	4	0	0	0	4	6	0
3	0	5	3	0	0	6	0	0	0	6	9	0
4	0	7	0	0	0	8	0	0	0	9	0	0
5	0	8	9	0	0	10	0	0	0	11	3	0
6	0	10	6	0	1	0	0	0	1	1	6	0
7	1	0	3	0	1	2	0	0	1	3	9	0
8	1	2	0	0	1	4	0	0	1	6	0	0
9	1	3	9	0	1	6	0	0	1	8	3	0
10	1	5	6	0	1	8	0	0	1	10	6	0
11	1	7	3	0	1	10	0	0	2	0	9	0
12	1	9	0	0	2	0	0	0	2	3	0	0
13	1	10	9	0	2	2	0	0	2	5	3	0
14	2	0	6	0	2	4	0	0	2	7	6	0
15	2	2	3	0	2	6	0	0	2	9	9	0
16	2	4	0	0	2	8	0	0	3	0	0	0
17	2	5	9	0	2	10	0	0	3	2	3	0
18	2	7	6	0	3	0	0	0	3	4	6	0
19	2	9	3	0	3	2	0	0	3	6	9	0
20	2	11	0	0	3	4	0	0	3	9	0	0
21	3	0	9	0	3	6	0	0	3	11	3	0
22	3	2	6	0	3	8	0	0	4	1	6	0
23	3	4	3	0	3	10	0	0	4	3	9	0
24	3	6	0	0	4	0	0	0	4	6	0	0
25	3	7	9	0	4	2	0	0	4	8	3	0
50	7	3	6	0	8	4	0	0	9	4	6	0
75	11	11	3	0	12	6	0	0	14	0	9	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	0	5	3	0	0	6	0	0	0	6	9
½	0	0	10	6	0	1	0	0	0	1	1	6
¾	0	1	3	9	0	1	6	0	0	1	8	3
1	0	1	9	0	0	2	0	0	0	2	3	0
2	0	3	6	0	0	4	0	0	0	4	6	0
3	0	5	3	0	0	6	0	0	0	6	9	0
4	0	7	0	0	0	8	0	0	0	9	0	0
5	0	8	9	0	0	10	0	0	0	11	3	0
6	0	10	6	0	1	0	0	0	1	1	6	0
7	1	0	3	0	1	2	0	0	1	3	9	0
8	1	2	0	0	1	4	0	0	1	6	0	0
9	1	3	9	0	1	6	0	0	1	8	3	0
10	1	5	6	0	1	8	0	0	1	10	6	0
11	1	7	3	0	1	10	0	0	2	0	9	0

Feet Long.	2½ inches broad.				2⅔ inches broad.				3 inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	2	6	0	0	2	9	0	0	3	0	0
2	0	5	0	0	0	5	6	0	0	6	0	0
3	0	7	6	0	0	8	3	0	0	9	0	0
4	0	10	0	0	0	11	0	0	1	0	0	0
5	1	0	6	0	1	1	9	0	1	3	0	0
6	1	3	0	0	1	4	6	0	1	6	0	0
7	1	5	6	0	1	7	3	0	1	9	0	0
8	1	8	0	0	1	10	0	0	2	0	0	0
9	1	10	6	0	2	0	9	0	2	3	0	0
10	2	1	0	0	2	3	6	0	2	6	0	0
11	2	3	6	0	2	6	3	0	2	9	0	0
12	2	6	0	0	2	9	0	0	3	0	0	0
13	2	8	6	0	2	11	9	0	3	3	0	0
14	2	11	0	0	3	2	6	0	3	6	0	0
15	3	1	6	0	3	5	3	0	3	9	0	0
16	3	4	0	0	3	8	0	0	4	0	0	0
17	3	6	6	0	3	10	9	0	4	3	0	0
18	3	9	0	0	4	1	6	0	4	6	0	0
19	3	11	6	0	4	4	3	0	4	9	0	0
20	4	2	0	0	4	7	0	0	5	0	0	0
21	4	4	6	0	4	9	9	0	5	3	0	0
22	4	7	0	0	5	0	6	0	5	6	0	0
23	4	9	6	0	5	3	3	0	5	9	0	0
24	5	0	0	0	5	6	0	0	6	0	0	0
25	5	2	6	0	5	8	9	0	6	3	0	0
50	10	5	0	0	11	5	6	0	12	6	0	0
75	15	7	6	0	17	2	3	0	18	9	0	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	0	7	6	0	0	8	3	0	0	9	0
½	0	1	3	0	0	1	4	6	0	1	6	0
¾	0	1	10	6	0	2	0	9	0	2	3	0
1	0	2	6	0	0	2	9	0	0	3	0	0
2	0	5	0	0	0	5	6	0	0	6	0	0
3	0	7	6	0	0	8	3	0	0	9	0	0
4	0	10	0	0	0	11	0	0	1	0	0	0
5	1	0	6	0	1	1	9	0	1	3	0	0
6	1	3	0	0	1	4	6	0	1	6	0	0
7	1	5	6	0	1	7	3	0	1	9	0	0
8	1	8	0	0	1	10	0	0	2	0	0	0
9	1	10	6	0	2	0	9	0	2	3	0	0
10	2	1	0	0	2	3	6	0	2	6	0	0
11	2	3	6	0	2	6	3	0	2	9	0	0

Feet Long.	3¼ inches broad.				3½ inches broad.				3¾ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	3	3	0	0	3	6	0	0	3	9	0
2	0	6	6	0	0	7	0	0	0	7	6	0
3	0	9	9	0	0	10	6	0	0	11	3	0
4	1	1	0	0	1	2	0	0	1	3	0	0
5	1	4	3	0	1	5	6	0	1	6	9	0
6	1	7	6	0	1	9	0	0	1	10	6	0
7	1	10	9	0	2	0	6	0	2	2	3	0
8	2	2	0	0	2	4	0	0	2	6	0	0
9	2	5	3	0	2	7	6	0	2	9	9	0
10	2	8	6	0	2	11	0	0	3	1	6	0
11	2	11	9	0	3	2	6	0	3	5	3	0
12	3	3	0	0	3	6	0	0	3	9	0	0
13	3	6	3	0	3	9	6	0	4	0	9	0
14	3	9	6	0	4	1	0	0	4	4	6	0
15	4	0	9	0	4	4	6	0	4	8	3	0
16	4	4	0	0	4	8	0	0	5	0	0	0
17	4	7	3	0	4	11	6	0	5	3	9	0
18	4	10	6	0	5	3	0	0	5	7	6	0
19	5	1	9	0	5	6	6	0	5	11	3	0
20	5	5	0	0	5	10	0	0	6	3	0	0
21	5	8	3	0	6	1	6	0	6	6	9	0
22	5	11	6	0	6	5	0	0	6	10	6	0
23	6	2	9	0	6	8	6	0	7	2	3	0
24	6	6	0	0	7	0	0	0	7	6	0	0
25	6	9	3	0	7	3	6	0	7	9	9	0
50	13	6	6	0	14	7	0	0	15	7	6	0
75	20	3	9	0	21	10	6	0	23	5	3	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	0	9	9	0	0	10	6	0	0	11	3
½	0	1	7	6	0	1	9	0	0	1	10	6
¾	0	2	5	3	0	2	7	6	0	2	9	9
1	0	3	3	0	0	3	6	0	0	3	9	0
2	0	6	6	0	0	7	0	0	0	7	6	0
3	0	9	9	0	0	10	6	0	0	11	3	0
4	1	1	0	0	1	2	0	0	1	3	0	0
5	1	4	3	0	1	5	6	0	1	6	9	0
6	1	7	6	0	1	9	0	0	1	10	6	0
7	1	10	9	0	2	0	6	0	2	2	3	0
8	2	2	0	0	2	4	0	0	2	6	0	0
9	2	5	3	0	2	7	6	0	2	9	9	0
10	2	8	6	0	2	11	0	0	3	1	6	0
11	2	11	9	0	3	2	6	0	3	5	3	0

Feet Long.	4 inches broad.				4¼ inches broad.				4½ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	4	0	0	0	4	3	0	0	4	6	0
2	0	8	0	0	0	8	6	0	0	9	0	0
3	1	0	0	0	1	0	9	0	1	1	6	0
4	1	4	0	0	1	5	0	0	1	6	0	0
5	1	8	0	0	1	9	3	0	1	10	6	0
6	2	0	0	0	2	1	6	0	2	3	0	0
7	2	4	0	0	2	5	9	0	2	7	6	0
8	2	8	0	0	2	10	0	0	3	0	0	0
9	3	0	0	0	3	2	3	0	3	4	6	0
10	3	4	0	0	3	6	6	0	3	9	0	0
11	3	8	0	0	3	10	9	0	4	1	6	0
12	4	0	0	0	4	3	0	0	4	6	0	0
13	4	4	0	0	4	7	3	0	4	10	6	0
14	4	8	0	0	4	11	6	0	5	3	9	0
15	5	0	0	0	5	3	9	0	5	7	6	0
16	5	4	0	0	5	8	0	0	6	0	0	0
17	5	8	0	0	6	0	3	0	6	4	6	0
18	6	0	0	0	6	4	6	0	6	9	0	0
19	6	4	0	0	6	8	9	0	7	1	6	0
20	6	8	0	0	7	1	0	0	7	6	0	0
21	7	0	0	0	7	5	3	0	7	10	6	0
22	7	4	0	0	7	9	6	0	8	3	0	0
23	7	8	0	0	8	1	9	0	8	7	6	0
24	8	0	0	0	8	6	0	0	9	0	0	0
25	8	4	0	0	8	10	3	0	9	4	6	0
50	16	8	0	0	17	8	6	0	18	9	0	0
75	25	0	0	0	26	6	9	0	28	1	6	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	1	0	0	0	1	0	9	0	1	1	6
½	0	2	0	0	0	2	1	6	0	2	3	0
¾	0	3	0	0	0	3	2	3	0	3	4	6
1	0	4	0	0	0	4	3	0	0	4	6	0
2	0	8	0	0	0	8	6	0	0	9	0	0
3	1	0	0	0	1	0	9	0	1	1	6	0
4	1	4	0	0	1	5	0	0	1	6	0	0
5	1	8	0	0	1	9	3	0	1	10	6	0
6	2	0	0	0	2	1	6	0	2	3	0	0
7	2	4	0	0	2	5	9	0	2	7	6	0
8	2	8	0	0	2	10	0	0	3	0	0	0
9	3	0	0	0	3	2	3	0	3	4	6	0
10	3	4	0	0	3	6	6	0	3	9	0	0
11	3	8	0	0	3	10	9	0	4	1	6	0

Feet Long.	4¾ inches broad.				5 inches broad.				5¼ inches broad.			
	Ft.	In.	Pts	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	4	9	0	0	5	0	0	0	5	3	0
2	0	9	6	0	0	10	0	0	0	10	6	0
3	1	2	3	0	1	3	0	0	1	3	9	0
4	1	7	0	0	1	8	0	0	1	9	0	0
5	1	11	9	0	2	1	0	0	2	2	3	0
6	2	4	6	0	2	6	0	0	2	7	6	0
7	2	9	3	0	2	11	0	0	3	0	9	0
8	3	2	0	0	3	4	0	0	3	6	0	0
9	3	6	9	0	3	9	0	0	3	11	3	0
10	3	11	6	0	4	2	0	0	4	4	6	0
11	4	4	3	0	4	7	0	0	4	9	9	0
12	4	9	0	0	5	0	0	0	5	3	0	0
13	5	1	9	0	5	5	0	0	5	8	3	0
14	5	6	6	0	5	10	0	0	6	1	6	0
15	5	11	3	0	6	3	0	0	6	6	9	0
16	6	4	0	0	6	8	0	0	7	0	0	0
17	6	8	9	0	7	1	0	0	7	5	3	0
18	7	1	6	0	7	6	0	0	7	10	6	0
19	7	6	3	0	7	11	0	0	8	3	9	0
20	7	11	0	0	8	4	0	0	8	9	0	0
21	8	3	9	0	8	9	0	0	9	2	3	0
22	8	8	6	0	9	2	0	0	9	7	6	0
23	9	1	3	0	9	7	0	0	10	0	9	0
24	9	6	0	0	10	0	0	0	10	6	0	0
25	9	10	9	0	10	5	0	0	10	11	3	0
50	19	9	6	0	20	10	0	0	21	10	6	0
75	29	8	3	0	31	3	0	0	32	9	9	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	1	2	3	0	1	3	0	0	1	3	9
½	0	2	4	6	0	2	6	0	0	2	7	6
¾	0	3	6	9	0	3	9	0	0	3	11	3
1	0	4	9	0	0	5	0	0	0	5	3	0
2	0	9	6	0	0	10	0	0	0	10	6	0
3	1	2	3	0	1	3	0	0	1	3	9	0
4	1	7	0	0	1	8	0	0	1	9	0	0
5	1	11	9	0	2	1	0	0	2	2	3	0
6	2	4	6	0	2	6	0	0	2	7	6	0
7	2	9	3	0	2	11	0	0	3	0	9	0
8	3	2	0	0	3	4	0	0	3	6	0	0
9	3	6	9	0	3	9	0	0	3	11	3	0
10	3	11	6	0	4	2	0	0	4	4	6	0
11	4	4	3	0	4	7	0	0	4	9	9	0

Feet Long.	5½ Inches broad.				5⅝ Inches broad.				6 Inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	5	6	0	0	5	9	0	0	6	0	0
2	0	11	0	0	0	11	6	0	1	0	0	0
3	1	4	6	0	1	5	3	0	1	6	0	0
4	1	10	0	0	1	11	0	0	2	0	0	0
5	2	3	6	0	2	4	9	0	2	6	0	0
6	2	9	0	0	2	10	6	0	3	0	0	0
7	3	2	6	0	3	4	3	0	3	6	0	0
8	3	8	0	0	3	10	0	0	4	0	0	0
9	4	1	6	0	4	3	9	0	4	6	0	0
10	4	7	0	0	4	9	6	0	5	0	0	0
11	5	0	6	0	5	3	3	0	5	6	0	0
12	5	6	0	0	5	9	0	0	6	0	0	0
13	5	11	6	0	6	2	9	0	6	6	0	0
14	6	5	0	0	6	8	6	0	7	0	0	0
15	6	10	6	0	7	2	3	0	7	6	0	0
16	7	4	0	0	7	8	0	0	8	0	0	0
17	7	9	6	0	8	1	9	0	8	6	0	0
18	8	3	0	0	8	7	6	0	9	0	0	0
19	8	8	6	0	9	1	3	0	9	6	0	0
20	9	2	0	0	9	7	0	0	10	0	0	0
21	9	7	6	0	10	0	9	0	10	6	0	0
22	10	1	0	0	10	6	6	0	11	0	0	0
23	10	6	6	0	11	0	3	0	11	6	0	0
24	11	0	0	0	11	6	0	0	12	0	0	0
25	11	5	6	0	11	11	9	0	12	6	0	0
50	22	11	0	0	23	11	6	0	25	0	0	0
75	34	4	6	0	35	11	3	0	37	6	0	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	1	4	6	0	1	5	3	0	1	6	0
½	0	2	9	0	0	2	10	6	0	3	0	0
¾	0	4	1	6	0	4	3	9	0	4	6	0
1	0	5	6	0	0	5	9	0	0	6	0	0
2	0	11	0	0	0	11	6	0	1	0	0	0
3	1	4	6	0	1	5	3	0	1	6	0	0
4	1	10	0	0	1	11	0	0	2	0	0	0
5	2	3	6	0	2	4	9	0	2	6	0	0
6	2	9	0	0	2	10	6	0	3	0	0	0
7	3	2	6	0	3	4	3	0	3	6	0	0
8	3	8	0	0	3	10	0	0	4	0	0	0
9	4	1	6	0	4	3	9	0	4	6	0	0
10	4	7	0	0	4	9	6	0	5	0	0	0
11	5	0	6	0	5	3	3	0	5	6	0	0

Feet Long.	6¼ inches broad.				6½ inches broad.				6¾ Inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	6	3	0	0	6	6	0	0	6	9	0
2	1	0	6	0	1	1	0	0	1	1	6	0
3	1	6	9	0	1	7	6	0	1	8	3	0
4	2	1	0	0	2	2	0	0	2	3	0	0
5	2	7	3	0	2	8	6	0	2	9	9	0
6	3	1	6	0	3	3	0	0	3	4	6	0
7	3	7	9	0	3	9	6	0	3	11	3	0
8	4	2	0	0	4	4	0	0	4	6	0	0
9	4	8	3	0	4	10	6	0	5	0	9	0
10	5	2	6	0	5	5	0	0	5	7	6	0
11	5	8	9	0	5	11	6	0	6	2	3	0
12	6	3	0	0	6	6	0	0	6	9	0	0
13	6	9	3	0	7	0	6	0	7	3	9	0
14	7	3	6	0	7	7	0	0	7	10	6	0
15	7	9	9	0	8	1	6	0	8	5	3	0
16	8	4	0	0	8	8	0	0	9	0	0	0
17	8	10	3	0	9	2	6	0	9	6	9	0
18	9	4	6	0	9	9	0	0	10	1	6	0
19	9	10	9	0	10	3	6	0	10	8	3	0
20	10	5	0	0	10	10	0	0	11	3	0	0
21	10	11	3	0	11	4	6	0	11	9	9	0
22	11	5	6	0	11	11	0	0	12	4	6	0
23	11	11	9	0	12	5	6	0	12	11	3	0
24	12	6	0	0	13	0	0	0	13	6	0	0
25	13	0	3	0	13	6	6	0	14	0	9	0
50	26	0	6	0	27	1	0	0	28	1	6	0
75	39	0	9	0	40	7	6	0	42	2	3	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	1	6	9	0	1	7	6	0	1	8	3
½	0	3	1	6	0	3	3	0	0	3	4	6
¾	0	4	8	3	0	4	10	6	0	5	0	9
1	0	6	3	0	0	6	6	0	0	6	9	0
2	1	0	6	0	1	1	0	0	1	1	6	0
3	1	6	9	0	1	7	6	0	1	8	3	0
4	2	1	0	0	2	2	0	0	2	3	0	0
5	2	7	3	0	2	8	6	0	2	9	9	0
6	3	1	6	0	3	3	0	0	3	4	6	0
7	3	7	9	0	3	9	6	0	3	11	3	0
8	4	2	0	0	4	4	0	0	4	6	0	0
9	4	8	3	0	4	10	6	0	5	0	9	0
10	5	2	6	0	5	5	0	0	5	7	6	0
11	5	8	9	0	5	11	6	0	6	2	3	0

Feet Long.	7 inches broad.				$7\frac{1}{4}$ inches broad.				$7\frac{1}{2}$ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	7	0	0	0	7	3	0	0	7	6	0
2	1	2	0	0	1	2	6	0	1	3	0	0
3	1	9	0	0	1	9	9	0	1	10	6	0
4	2	4	0	0	2	5	0	0	2	6	0	0
5	2	11	0	0	3	0	3	0	3	1	6	0
6	3	6	0	0	3	7	6	0	3	9	0	0
7	4	1	0	0	4	2	9	0	4	4	6	0
8	4	8	0	0	4	10	0	0	5	0	0	0
9	5	3	0	0	5	5	3	0	5	7	6	0
10	5	10	0	0	6	0	6	0	6	3	0	0
11	6	5	0	0	6	7	9	0	6	10	6	0
12	7	0	0	0	7	3	0	0	7	6	0	0
13	7	7	0	0	7	10	3	0	8	1	6	0
14	8	2	0	0	8	5	6	0	8	9	0	0
15	8	9	0	0	9	0	9	0	9	4	6	0
16	9	4	0	0	9	8	0	0	10	0	0	0
17	9	11	0	0	10	3	3	0	10	7	6	0
18	10	6	0	0	10	10	6	0	11	3	0	0
19	11	1	0	0	11	5	9	0	11	10	6	0
20	11	8	0	0	12	1	0	0	12	6	0	0
21	12	3	0	0	12	8	3	0	13	1	6	0
22	12	10	0	0	13	3	6	0	13	9	0	0
23	13	5	0	0	13	10	9	0	14	4	6	0
24	14	0	0	0	14	6	0	0	15	0	0	0
25	14	7	0	0	15	1	3	0	15	7	6	0
50	29	2	0	0	30	2	6	0	31	3	0	0
75	43	9	0	0	45	3	9	0	46	10	6	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
$\frac{1}{4}$	0	1	9	0	0	1	9	9	0	1	10	6
$\frac{1}{2}$	0	3	6	0	0	3	7	6	0	3	9	0
$\frac{3}{4}$	0	5	3	0	0	5	5	3	0	5	7	6
1	0	7	0	0	0	7	3	0	0	7	6	0
2	1	2	0	0	1	2	6	0	1	3	0	0
3	1	9	0	0	1	9	9	0	1	10	6	0
4	2	4	0	0	2	5	0	0	2	6	0	0
5	2	11	0	0	3	0	3	0	3	1	6	0
6	3	6	0	0	3	7	6	0	3	9	0	0
7	4	1	0	0	4	2	9	0	4	4	6	0
8	4	8	0	0	4	10	0	0	5	0	0	0
9	5	3	0	0	5	5	3	0	5	7	6	0
10	5	10	0	0	6	0	6	0	6	3	0	0
11	6	5	0	0	6	7	9	0	6	10	6	0

Feet Long.	7¾ inches broad.				8 inches broad.				8¼ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	7	9	0	0	8	0	0	0	8	3	0
2	1	3	6	0	1	4	0	0	1	4	6	0
3	1	11	3	0	2	0	0	0	2	0	9	0
4	2	7	0	0	2	8	0	0	2	9	0	0
5	3	2	9	0	3	4	0	0	3	5	3	0
6	3	10	6	0	4	0	0	0	4	1	6	0
7	4	6	3	0	4	8	0	0	4	9	9	0
8	5	2	0	0	5	4	0	0	5	6	0	0
9	5	9	9	0	6	0	0	0	6	2	3	0
10	6	5	6	0	6	8	0	0	6	10	6	0
11	7	1	3	0	7	4	0	0	7	6	9	0
12	7	9	0	0	8	0	0	0	8	3	0	0
13	8	4	9	0	8	8	0	0	8	11	3	0
14	9	0	6	0	9	4	0	0	9	7	6	0
15	9	8	3	0	10	0	0	0	10	3	9	0
16	10	4	0	0	10	8	0	0	11	0	0	0
17	10	11	9	0	11	4	0	0	11	8	3	0
18	11	7	6	0	12	0	0	0	12	4	6	0
19	12	3	3	0	12	8	0	0	13	0	9	0
20	12	11	0	0	13	4	0	0	13	9	0	0
21	13	6	9	0	14	0	0	0	14	5	3	0
22	14	2	6	0	14	8	0	0	15	1	6	0
23	14	10	3	0	15	4	0	0	15	9	9	0
24	15	6	0	0	16	0	0	0	16	6	0	0
25	16	1	9	0	16	8	0	0	17	2	3	0
50	32	3	6	0	33	4	0	0	34	4	6	0
75	48	5	3	0	50	0	0	0	51	6	9	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	1	11	3	0	2	0	0	0	2	0	9
½	0	3	10	6	0	4	0	0	0	4	1	6
¾	0	5	9	9	0	6	0	0	0	6	2	3
1	0	7	9	0	0	8	0	0	0	8	3	0
2	1	3	6	0	1	4	0	0	1	4	6	0
3	1	11	3	0	2	0	0	0	2	0	9	0
4	2	7	0	0	2	8	0	0	2	9	0	0
5	3	2	9	0	3	4	0	0	3	5	3	0
6	3	10	6	0	4	0	0	0	4	1	6	0
7	4	6	3	0	4	8	0	0	4	9	9	0
8	5	2	0	0	5	4	0	0	5	6	0	0
9	5	9	9	0	6	0	0	0	6	2	3	0
10	6	5	6	0	6	8	0	0	6	10	6	0
11	7	1	3	0	7	4	0	0	7	6	9	0

Feet Long.	8½ inches broad.				8¾ inches broad.				9 inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	8	6	0	0	8	9	0	0	9	0	0
2	1	5	0	0	1	5	6	0	1	6	0	0
3	2	1	6	0	2	2	3	0	2	3	0	0
4	2	10	0	0	2	11	0	0	3	0	0	0
5	3	6	6	0	3	7	9	0	3	9	0	0
6	4	3	0	0	4	4	6	0	4	6	0	0
7	4	11	6	0	5	1	3	0	5	3	0	0
8	5	8	0	0	5	10	0	0	6	0	0	0
9	6	4	6	0	6	6	9	0	6	9	0	0
10	7	1	0	0	7	3	6	0	7	6	0	0
11	7	9	6	0	8	0	3	0	8	3	0	0
12	8	6	0	0	8	9	0	0	9	0	0	0
13	9	2	6	0	9	5	9	0	9	9	0	0
14	9	11	0	0	10	2	6	0	10	6	0	0
15	10	7	6	0	10	11	3	0	11	3	0	0
16	11	4	0	0	11	8	0	0	12	0	0	0
17	12	0	6	0	12	4	9	0	12	9	0	0
18	12	9	0	0	13	1	6	0	13	6	0	0
19	13	5	6	0	13	10	3	0	14	3	0	0
20	14	2	0	0	14	7	0	0	15	0	0	0
21	14	10	6	0	15	3	9	0	15	9	0	0
22	15	7	0	0	16	0	6	0	16	6	0	0
23	16	3	6	0	16	9	3	0	17	3	0	0
24	17	0	0	0	17	6	0	0	18	0	0	0
25	17	8	6	0	18	2	9	0	18	9	0	0
50	35	5	0	0	36	5	6	0	37	6	0	0
75	53	1	6	0	54	8	3	0	56	3	0	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	2	1	6	0	2	2	3	0	2	3	0
½	0	4	3	0	0	4	4	6	0	4	6	0
¾	0	6	4	6	0	6	6	9	0	6	9	0
1	0	8	6	0	0	8	9	0	0	9	0	0
2	1	5	0	0	1	5	6	0	1	6	0	0
3	2	1	6	0	2	2	3	0	2	3	0	0
4	2	10	0	0	2	11	0	0	3	0	0	0
5	3	6	6	0	3	7	9	0	3	9	0	0
6	4	3	0	0	4	4	6	0	4	6	0	0
7	4	11	6	0	5	1	3	0	5	3	0	0
8	5	8	0	0	5	10	0	0	6	0	0	0
9	6	4	6	0	6	6	9	0	6	9	0	0
10	7	1	0	0	7	3	6	0	7	6	0	0
11	7	9	6	0	8	0	3	0	8	3	0	0

Feet Long.	9¼ inches broad.				9⅓ inches broad.				9¾ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	9	3	0	0	9	6	0	0	9	9	0
2	1	6	6	0	1	7	0	0	1	7	6	0
3	2	3	9	0	2	4	6	0	2	5	3	0
4	3	1	0	0	3	2	0	0	3	3	0	0
5	3	10	3	0	3	11	6	0	4	0	9	0
6	4	7	6	0	4	9	0	0	4	10	6	0
7	5	4	9	0	5	6	6	0	5	8	3	0
8	6	2	0	0	6	4	0	0	6	6	0	0
9	6	11	3	0	7	1	6	0	7	3	9	0
10	7	8	6	0	7	11	0	0	8	1	6	0
11	8	5	9	0	8	8	6	0	8	11	3	0
12	9	3	0	0	9	6	0	0	9	9	0	0
13	10	0	3	0	10	3	6	0	10	6	9	0
14	10	9	6	0	11	1	0	0	11	4	6	0
15	11	6	9	0	11	10	6	0	12	2	3	0
16	12	4	0	0	12	8	0	0	13	0	0	0
17	13	1	3	0	13	5	6	0	13	9	9	0
18	13	10	6	0	14	3	0	0	14	7	6	0
19	14	7	9	0	15	0	6	0	15	5	3	0
20	15	5	0	0	15	10	0	0	16	3	0	0
21	16	2	3	0	16	7	6	0	17	0	9	0
22	16	11	6	0	17	5	0	0	17	10	6	0
23	17	8	9	0	18	2	6	0	18	8	3	0
24	18	6	0	0	19	0	0	0	19	6	0	0
25	19	3	3	0	19	9	6	0	20	3	9	0
50	38	6	6	0	39	7	0	0	40	7	6	0
75	57	9	9	0	59	4	6	0	60	11	3	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	2	3	9	0	2	4	6	0	2	5	3
½	0	4	7	6	0	4	9	0	0	4	10	6
¾	0	6	11	3	0	7	1	6	0	7	3	9
1	0	9	3	0	0	9	6	0	0	9	9	0
2	1	6	6	0	1	7	0	0	1	7	6	0
3	2	3	9	0	2	4	6	0	2	5	3	0
4	3	1	0	0	3	2	0	0	3	3	0	0
5	3	10	3	0	3	11	6	0	4	0	9	0
6	4	7	6	0	4	9	0	0	4	10	6	0
7	5	4	9	0	5	6	6	0	5	8	3	0
8	6	2	0	0	6	4	0	0	6	6	0	0
9	6	11	3	0	7	1	6	0	7	3	9	0
10	7	8	6	0	7	11	0	0	8	1	6	0
11	8	5	9	0	8	8	6	0	8	11	3	0

Feet Long.	10 inches broad.				$10\frac{1}{2}$ inches broad.				$10\frac{1}{3}$ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	10	0	0	0	10	3	0	0	10	6	0
2	1	8	0	0	1	8	6	0	1	9	0	0
3	2	6	0	0	2	6	9	0	2	7	6	0
4	3	4	0	0	3	5	0	0	3	6	0	0
5	4	2	0	0	4	3	3	0	4	4	6	0
6	5	0	0	0	5	1	6	0	5	3	0	0
7	5	10	0	0	5	11	9	0	6	1	6	0
8	6	8	0	0	6	10	0	0	7	0	0	0
9	7	6	0	0	7	8	3	0	7	10	6	0
10	8	4	0	0	8	6	6	0	8	9	0	0
11	9	2	0	0	9	4	9	0	9	7	6	0
12	10	0	0	0	10	3	0	0	10	6	0	0
13	10	10	0	0	11	1	3	0	11	4	6	0
14	11	8	0	0	11	11	6	0	12	3	0	0
15	12	6	0	0	12	9	9	0	13	1	6	0
16	13	4	0	0	13	8	0	0	14	0	0	0
17	14	2	0	0	14	6	3	0	14	10	6	0
18	15	0	0	0	15	4	6	0	15	9	0	0
19	15	10	0	0	16	2	9	0	16	7	6	0
20	16	8	0	0	17	1	0	0	17	6	0	0
21	17	6	0	0	17	11	3	0	18	4	6	0
22	18	4	0	0	18	9	6	0	19	3	0	0
23	19	2	0	0	19	7	9	0	20	1	6	0
24	20	0	0	0	20	6	0	0	21	0	0	0
25	20	10	0	0	21	4	3	0	21	10	6	0
50	41	8	0	0	42	8	6	0	43	9	0	0
75	62	6	0	0	64	0	9	0	65	7	6	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
$\frac{1}{4}$	0	2	6	0	0	2	6	9	0	2	7	6
$\frac{1}{2}$	0	5	0	0	0	5	1	6	0	5	3	0
$\frac{3}{4}$	0	7	6	0	0	7	8	3	0	7	10	6
1	0	10	0	0	0	10	3	0	0	10	6	0
2	1	8	0	0	1	8	6	0	1	9	0	0
3	2	6	0	0	2	6	9	0	2	7	6	0
4	3	4	0	0	3	5	0	0	3	6	0	0
5	4	2	0	0	4	3	3	0	4	4	6	0
6	5	0	0	0	5	1	6	0	5	3	0	0
7	5	10	0	0	5	11	9	0	6	1	6	0
8	6	8	0	0	6	10	0	0	7	0	0	0
9	7	6	0	0	7	8	3	0	7	10	6	0
10	8	4	0	0	8	6	6	0	8	9	0	0
11	9	2	0	0	9	4	9	0	9	7	6	0

Feet Long.	10¾ inches broad.				11 inches broad.				11¼ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	10	9	0	0	11	0	0	0	11	3	0
2	1	9	6	0	1	10	0	0	1	10	6	0
3	2	8	3	0	2	9	0	0	2	9	9	0
4	3	7	0	0	3	8	0	0	3	9	0	0
5	4	5	9	0	4	7	0	0	4	8	3	0
6	5	4	6	0	5	6	0	0	5	7	6	0
7	6	3	3	0	6	5	0	0	6	6	9	0
8	7	2	0	0	7	4	0	0	7	6	0	0
9	8	0	9	0	8	3	0	0	8	5	3	0
10	8	11	6	0	9	2	0	0	9	4	6	0
11	9	10	3	0	10	1	0	0	10	3	9	0
12	10	9	0	0	11	0	0	0	11	3	0	0
13	11	7	9	0	11	11	0	0	12	2	3	0
14	12	6	6	0	12	10	0	0	13	1	6	0
15	13	5	3	0	13	9	0	0	14	0	9	0
16	14	4	0	0	14	8	0	0	15	0	0	0
17	15	2	9	0	15	7	0	0	15	11	3	0
18	16	1	6	0	16	6	0	0	16	10	6	0
19	17	0	3	0	17	5	0	0	17	9	9	0
20	17	11	0	0	18	4	0	0	18	9	0	0
21	18	9	9	0	19	3	0	0	19	8	3	0
22	19	8	6	0	20	2	0	0	20	7	6	0
23	20	7	3	0	21	1	0	0	21	6	9	0
24	21	6	0	0	22	0	0	0	22	6	0	0
25	22	4	9	0	22	11	0	0	23	5	3	0
50	44	9	6	0	45	10	0	0	46	10	6	0
75	67	2	3	0	68	9	0	0	70	3	9	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	2	8	3	0	2	9	0	0	2	9	9
½	0	5	4	6	0	5	6	0	0	5	7	6
¾	0	8	0	9	0	8	3	0	0	8	5	3
1	0	10	9	0	0	11	0	0	0	11	3	0
2	1	9	6	0	1	10	0	0	1	10	6	0
3	2	8	3	0	2	9	0	0	2	9	9	0
4	3	7	0	0	3	8	0	0	3	9	0	0
5	4	5	9	0	4	7	0	0	4	8	3	0
6	5	4	6	0	5	6	0	0	5	7	6	0
7	6	3	3	0	6	5	0	0	6	6	9	0
8	7	2	0	0	7	4	0	0	7	6	0	0
9	8	0	9	0	8	3	0	0	8	5	3	0
10	8	11	6	0	9	2	0	0	9	4	6	0
11	9	10	3	0	10	1	0	0	10	3	9	0

Feet Long.	11½ inches broad.				11¾ inches broad.				12 inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	0	11	6	0	0	11	9	0	1	0	0	0
2	1	11	0	0	1	11	6	0	2	0	0	0
3	2	10	6	0	2	11	3	0	3	0	0	0
4	3	10	0	0	3	11	0	0	4	0	0	0
5	4	9	6	0	4	10	9	0	5	0	0	0
6	5	9	0	0	5	10	6	0	6	0	0	0
7	6	8	6	0	6	10	3	0	7	0	0	0
8	7	8	0	0	7	10	0	0	8	0	0	0
9	8	7	6	0	8	9	9	0	9	0	0	0
10	9	7	0	0	9	9	6	0	10	0	0	0
11	10	6	6	0	10	9	3	0	11	0	0	0
12	11	6	0	0	11	9	0	0	12	0	0	0
13	12	5	6	0	12	8	9	0	13	0	0	0
14	13	5	0	0	13	8	6	0	14	0	0	0
15	14	4	6	0	14	8	3	0	15	0	0	0
16	15	4	0	0	15	8	0	0	16	0	0	0
17	16	3	6	0	16	7	9	0	17	0	0	0
18	17	3	0	0	17	7	6	0	18	0	0	0
19	18	2	6	0	18	7	3	0	19	0	0	0
20	19	2	0	0	19	7	0	0	20	0	0	0
21	20	1	6	0	20	6	9	0	21	0	0	0
22	21	1	0	0	21	6	6	0	22	0	0	0
23	22	0	6	0	22	6	3	0	23	0	0	0
24	23	0	0	0	23	6	0	0	24	0	0	0
25	23	11	6	0	24	5	9	0	25	0	0	0
50	47	11	0	0	48	11	6	0	50	0	0	0
75	71	10	6	0	73	5	3	0	75	0	0	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	2	10	6	0	2	11	3	0	3	0	0
½	0	5	9	0	0	5	10	6	0	6	0	0
¾	0	8	7	6	0	8	9	9	0	9	0	0
1	0	11	6	0	0	11	9	0	1	0	0	0
2	1	11	0	0	1	11	6	0	2	0	0	0
3	2	10	6	0	2	11	3	0	3	0	0	0
4	3	10	0	0	3	11	0	0	4	0	0	0
5	4	9	6	0	4	10	9	0	5	0	0	0
6	5	9	0	0	5	10	6	0	6	0	0	0
7	6	8	6	0	6	10	3	0	7	0	0	0
8	7	8	0	0	7	10	0	0	8	0	0	0
9	8	7	6	0	8	9	9	0	9	0	0	0
10	9	7	0	0	9	9	6	0	10	0	0	0
11	10	6	6	0	10	9	3	0	11	0	0	0

Feet Long.	12¼ inches broad.				12½ inches broad.				12¾ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	0	3	0	1	0	6	0	1	0	9	0
2	2	0	6	0	2	1	0	0	2	1	6	0
3	3	0	9	0	3	1	6	0	3	2	3	0
4	4	1	0	0	4	2	0	0	4	3	0	0
5	5	1	3	0	5	2	6	0	5	3	9	0
6	6	1	6	0	6	3	0	0	6	4	6	0
7	7	1	9	0	7	3	6	0	7	5	3	0
8	8	2	0	0	8	4	0	0	8	6	0	0
9	9	2	3	0	9	4	6	0	9	6	9	0
10	10	2	6	0	10	5	0	0	10	7	6	0
11	11	2	9	0	11	5	6	0	11	8	3	0
12	12	3	0	0	12	6	0	0	12	9	0	0
13	13	3	3	0	13	6	6	0	13	9	9	0
14	14	3	6	0	14	7	0	0	14	10	6	0
15	15	3	9	0	15	7	6	0	15	11	3	0
16	16	4	0	0	16	8	0	0	17	0	0	0
17	17	4	3	0	17	8	6	0	18	0	9	0
18	18	4	6	0	18	9	0	0	19	1	6	0
19	19	4	9	0	19	9	6	0	20	2	3	0
20	20	5	0	0	20	10	0	0	21	3	0	0
21	21	5	3	0	21	10	6	0	22	3	9	0
22	22	5	6	0	22	11	0	0	23	4	6	0
23	23	5	9	0	23	11	6	0	24	5	3	0
24	24	6	0	0	25	0	0	0	25	6	0	0
25	25	6	3	0	26	0	6	0	26	6	9	0
50	51	0	6	0	52	1	0	0	53	1	6	0
75	76	6	9	0	78	1	6	0	79	8	3	0

Inches Long.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.	In.	Pts.	2ds.	3ds.
¼	0	3	0	9	0	3	1	6	0	3	2	3
½	0	6	1	6	0	6	3	0	0	6	4	6
¾	0	9	2	3	0	9	4	6	0	9	6	9
1	1	0	3	0	1	0	6	0	1	0	9	0
2	2	0	6	0	2	1	0	0	2	1	6	0
3	3	0	9	0	3	1	6	0	3	2	3	0
4	4	1	0	0	4	2	0	0	4	3	0	0
5	5	1	3	0	5	2	6	0	5	3	9	0
6	6	1	6	0	6	3	0	0	6	4	6	0
7	7	1	9	0	7	3	6	0	7	5	3	0
8	8	2	0	0	8	4	0	0	8	6	0	0
9	9	2	3	0	9	4	6	0	9	6	9	0
10	10	2	6	0	10	5	0	0	10	7	6	0
11	11	2	9	0	11	5	6	0	11	8	3	0

Feet Long.	13 inches broad.				13½ inches broad.				13⅓ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	1	0	0	1	1	3	0	1	1	6	0
2	2	2	0	0	2	2	6	0	2	3	0	0
3	3	3	0	0	3	3	9	0	3	4	6	0
4	4	4	0	0	4	5	0	0	4	6	0	0
5	5	5	0	0	5	6	3	0	5	7	6	0
6	6	6	0	0	6	7	6	0	6	9	0	0
7	7	7	0	0	7	8	9	0	7	10	6	0
8	8	8	0	0	8	10	0	0	9	0	0	0
9	9	9	0	0	9	11	3	0	10	1	6	0
10	10	10	0	0	11	0	6	0	11	3	0	0
11	11	11	0	0	12	1	9	0	12	4	6	0
12	13	0	0	0	13	3	0	0	13	6	0	0
13	14	1	0	0	14	4	3	0	14	7	6	0
14	15	2	0	0	15	5	6	0	15	9	0	0
15	16	3	0	0	16	6	9	0	16	10	6	0
16	17	4	0	0	17	8	0	0	18	0	0	0
17	18	5	0	0	18	9	3	0	19	1	6	0
18	19	6	0	0	19	10	6	0	20	3	0	0
19	20	7	0	0	20	11	9	0	21	4	6	0
20	21	8	0	0	22	1	0	0	22	6	0	0
21	22	9	0	0	23	2	3	0	23	7	6	0
22	23	10	0	0	24	3	6	0	24	9	0	0
23	24	11	0	0	25	4	9	0	25	10	6	0
24	26	0	0	0	26	6	0	0	27	0	0	0
25	27	1	0	0	27	7	3	0	28	1	6	0
50	54	2	0	0	55	2	6	0	56	3	0	0
75	81	3	0	0	82	9	9	0	84	4	6	0

Inches Long.	In.	Pts.	2ds.	3ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	3	3	0	0	0	3	3	0	0	3	4
½	0	6	6	0	0	0	6	7	0	0	6	9
¾	0	9	9	0	0	0	9	11	0	0	10	1
1	1	1	0	0	0	1	1	3	0	1	1	6
2	2	2	0	0	0	2	2	6	0	2	3	0
3	3	3	0	0	0	3	3	9	0	3	4	6
4	4	4	0	0	0	4	5	0	0	4	6	0
5	5	5	0	0	0	5	6	3	0	5	7	6
6	6	6	0	0	0	6	7	6	0	6	9	0
7	7	7	0	0	0	7	8	9	0	7	10	6
8	8	8	0	0	0	8	10	0	0	9	0	0
9	9	9	0	0	0	9	11	3	0	10	1	6
10	10	10	0	0	0	11	0	6	0	11	3	0
11	11	11	0	0	1	0	1	9	1	0	4	6

Feet Long.	13¾ inches broad.				14 inches broad.				14½ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	1	9	0	1	2	0	0	1	2	3	0
2	2	3	6	0	2	4	0	0	2	4	6	0
3	3	5	3	0	3	6	0	0	3	6	9	0
4	4	7	0	0	4	8	0	0	4	9	0	0
5	5	8	9	0	5	10	0	0	5	11	3	0
6	6	10	6	0	7	0	0	0	7	1	6	0
7	8	0	3	0	8	2	0	0	8	3	9	0
8	9	2	0	0	9	4	0	0	9	6	0	0
9	10	3	9	0	10	6	0	0	10	8	3	0
10	11	5	6	0	11	8	0	0	11	10	6	0
11	12	7	3	0	12	10	0	0	13	0	9	0
12	13	9	0	0	14	0	0	0	14	3	0	0
13	14	10	9	0	15	2	0	0	15	5	3	0
14	16	0	6	0	16	4	0	0	16	7	6	0
15	17	2	3	0	17	6	0	0	17	9	9	0
16	18	4	0	0	18	8	0	0	19	0	0	0
17	19	5	9	0	19	10	0	0	20	2	3	0
18	20	7	6	0	21	0	0	0	21	4	6	0
19	21	9	3	0	22	2	0	0	22	6	9	0
20	22	11	0	0	23	4	0	0	23	9	0	0
21	24	0	9	0	24	6	0	0	24	11	3	0
22	25	2	6	0	25	8	0	0	26	1	6	0
23	26	4	3	0	26	10	0	0	27	3	9	0
24	27	6	0	0	28	0	0	0	28	6	0	0
25	28	7	9	0	29	2	0	0	29	8	3	0
50	57	3	6	0	58	4	0	0	59	4	6	0
75	85	11	3	0	87	6	0	0	89	0	9	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	3	5	0	0	3	6	0	0	3	6
½	0	0	6	10	0	0	7	0	0	0	7	1
¾	0	0	10	3	0	0	10	6	0	0	10	8
1	0	1	1	9	0	1	2	0	0	1	2	3
2	0	2	3	6	0	2	4	0	0	2	4	6
3	0	3	5	3	0	3	6	0	0	3	6	9
4	0	4	7	0	0	4	8	0	0	4	9	0
5	0	5	8	9	0	5	10	0	0	5	11	3
6	0	6	10	6	0	7	0	0	0	7	1	6
7	0	8	0	3	0	8	2	0	0	8	3	9
8	0	9	2	0	0	9	4	0	0	9	6	0
9	0	10	3	9	0	10	6	0	0	10	8	3
10	0	11	5	6	0	11	8	0	0	11	10	6
11	1	0	7	3	1	0	10	0	1	1	0	9

Feet Long.	14½ Inches broad.				14¾ Inches broad.				15 Inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	2	6	0	1	2	9	0	1	3	0	0
2	2	5	0	0	2	5	6	0	2	6	0	0
3	3	7	6	0	3	8	3	0	3	9	0	0
4	4	10	0	0	4	11	0	0	5	0	0	0
5	6	0	6	0	6	1	9	0	6	3	0	0
6	7	3	0	0	7	4	6	0	7	6	0	0
7	8	5	6	0	8	7	3	0	8	9	0	0
8	9	8	0	0	9	10	0	0	10	0	0	0
9	10	10	6	0	11	0	9	0	11	3	0	0
10	12	1	0	0	12	3	6	0	12	6	0	0
11	13	3	6	0	13	6	3	0	13	9	0	0
12	14	6	0	0	14	9	0	0	15	0	0	0
13	15	8	6	0	15	11	9	0	16	3	0	0
14	16	11	0	0	17	2	6	0	17	6	0	0
15	18	1	6	0	18	5	3	0	18	9	0	0
16	19	4	0	0	19	8	0	0	20	0	0	0
17	20	6	6	0	20	10	9	0	21	3	0	0
18	21	9	0	0	22	1	6	0	22	6	0	0
19	22	11	6	0	23	4	3	0	23	9	0	0
20	24	2	0	0	24	7	0	0	25	0	0	0
21	25	4	6	0	25	9	9	0	26	3	0	0
22	26	7	0	0	27	0	6	0	27	6	0	0
23	27	9	6	0	28	3	3	0	28	9	0	0
24	29	0	0	0	29	6	0	0	30	0	0	0
25	30	2	6	0	30	8	9	0	31	3	0	0
50	60	5	0	0	61	5	6	0	62	6	0	0
75	90	7	6	0	92	2	3	0	93	9	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	3	7	0	0	3	8	0	0	3	9
½	0	0	7	3	0	0	7	4	0	0	7	6
¾	0	0	10	10	0	0	11	0	0	0	11	3
1	0	1	2	6	0	1	2	9	0	1	3	0
2	0	2	5	0	0	2	5	6	0	2	6	0
3	0	3	7	6	0	3	8	3	0	3	9	0
4	0	4	10	0	0	4	11	0	0	5	0	0
5	0	6	0	6	0	6	1	9	0	6	3	0
6	0	7	3	0	0	7	4	6	0	7	6	0
7	0	8	5	6	0	8	7	3	0	8	9	0
8	0	9	8	0	0	9	10	0	0	10	0	0
9	0	10	10	6	0	11	0	9	0	11	3	0
10	1	0	1	0	1	0	3	6	1	0	6	0
11	1	1	3	6	1	1	6	3	1	1	9	0

Feet Long.	15¼ inches broad.				15½ inches broad.				15¾ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	3	3	0	1	3	6	0	1	3	9	0
2	2	6	6	0	2	7	0	0	2	7	6	0
3	3	9	9	0	3	10	6	0	3	11	3	0
4	5	1	0	0	5	2	0	0	5	3	0	0
5	6	4	3	0	6	5	6	0	6	6	9	0
6	7	7	6	0	7	9	0	0	7	10	6	0
7	8	10	9	0	9	0	6	0	9	2	3	0
8	10	2	0	0	10	4	0	0	10	6	0	0
9	11	5	3	0	11	7	6	0	11	9	9	0
10	12	8	6	0	12	11	0	0	13	1	6	0
11	13	11	9	0	14	2	6	0	14	5	3	0
12	15	3	0	0	15	6	0	0	15	9	0	0
13	16	6	3	0	16	9	6	0	17	0	9	0
14	17	9	6	0	18	1	0	0	18	4	6	0
15	19	0	9	0	19	4	6	0	19	8	3	0
16	20	4	0	0	20	8	0	0	21	0	0	0
17	21	7	3	0	21	11	6	0	22	3	9	0
18	22	10	6	0	23	3	0	0	23	7	6	0
19	24	1	9	0	24	6	6	0	24	11	3	0
20	25	5	0	0	25	10	0	0	26	3	0	0
21	26	8	3	0	27	1	6	0	27	6	9	0
22	27	11	6	0	28	5	0	0	28	10	6	0
23	29	2	9	0	29	8	6	0	30	2	3	0
24	30	6	0	0	31	0	0	0	31	6	0	0
25	31	9	3	0	32	3	6	0	32	9	9	0
50	63	6	6	0	64	7	0	0	65	7	6	0
75	95	3	9	0	96	10	6	0	98	5	3	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	3	9	0	0	3	10	0	0	3	11
½	0	0	7	7	0	0	7	9	0	0	7	10
¾	0	0	11	5	0	0	11	7	0	0	11	9
1	0	1	3	3	0	1	3	6	0	1	3	9
2	0	2	6	6	0	2	7	0	0	2	7	6
3	0	3	9	9	0	3	10	6	0	3	11	3
4	0	5	1	0	0	5	2	0	0	5	3	0
5	0	6	4	3	0	6	5	6	0	6	6	9
6	0	7	7	6	0	7	9	0	0	7	10	6
7	0	8	10	9	0	9	0	6	0	9	2	3
8	0	10	2	0	0	10	4	0	0	10	6	0
9	0	11	5	3	0	11	7	6	0	11	9	9
10	1	0	8	6	1	0	11	0	1	1	1	6
11	1	1	11	9	1	2	2	6	1	2	5	3

Feet Long.	16 inches broad.				16¼ inches broad.				16½ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	4	0	0	1	4	3	0	1	4	6	0
2	2	8	0	0	2	8	6	0	2	9	0	0
3	4	0	0	0	4	0	9	0	4	1	6	0
4	5	4	0	0	5	5	0	0	5	6	0	0
5	6	8	0	0	6	9	3	0	6	10	6	0
6	8	0	0	0	8	1	6	0	8	3	0	0
7	9	4	0	0	9	5	9	0	9	7	6	0
8	10	8	0	0	10	10	0	0	11	0	0	0
9	12	0	0	0	12	2	3	0	12	4	6	0
10	13	4	0	0	13	6	6	0	13	9	0	0
11	14	8	0	0	14	10	9	0	15	1	6	0
12	16	0	0	0	16	3	0	0	16	6	0	0
13	17	4	0	0	17	7	3	0	17	10	6	0
14	18	8	0	0	18	11	6	0	19	3	0	0
15	20	0	0	0	20	3	9	0	20	7	6	0
16	21	4	0	0	21	8	0	0	22	0	0	0
17	22	8	0	0	23	0	3	0	23	4	6	0
18	24	0	0	0	24	4	6	0	24	9	0	0
19	25	4	0	0	25	8	9	0	26	1	6	0
20	26	8	0	0	27	1	0	0	27	6	0	0
21	28	0	0	0	28	5	3	0	28	10	6	0
22	29	4	0	0	29	9	6	0	30	3	0	0
23	30	8	0	0	31	1	9	0	31	7	6	0
24	32	0	0	0	32	6	0	0	33	0	0	0
25	33	4	0	0	33	10	3	0	34	4	6	0
50	66	8	0	0	67	8	6	0	68	9	0	0
75	100	0	0	0	101	6	9	0	103	1	6	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	4	0	0	0	4	0	0	0	4	1
½	0	0	8	0	0	0	8	1	0	0	8	3
¾	0	1	0	0	0	1	0	2	0	1	0	4
1	0	1	4	0	0	1	4	3	0	1	4	6
2	0	2	8	0	0	2	8	6	0	2	9	0
3	0	4	0	0	0	4	0	9	0	4	1	6
4	0	5	4	0	0	5	5	0	0	5	6	0
5	0	6	8	0	0	6	9	3	0	6	10	6
6	0	8	0	0	0	8	1	6	0	8	3	0
7	0	9	4	0	0	9	5	9	0	9	7	6
8	0	10	8	0	0	10	10	0	0	11	0	0
9	1	0	0	0	1	0	2	3	1	0	4	6
10	1	1	4	0	1	1	6	6	1	1	9	0
11	1	2	8	0	1	2	10	9	1	3	1	6

Feet Long.	16¾ inches broad.				17 inches broad.				17¼ Inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	4	9	0	1	5	0	0	1	5	3	0
2	2	9	6	0	2	10	0	0	2	10	6	0
3	4	2	3	0	4	3	0	0	4	3	9	0
4	5	7	0	0	5	8	0	0	5	9	0	0
5	6	11	9	0	7	1	0	0	7	2	3	0
6	8	4	6	0	8	6	0	0	8	7	6	0
7	9	9	3	0	9	11	0	0	10	0	9	0
8	11	2	0	0	11	4	0	0	11	6	0	0
9	12	6	9	0	12	9	0	0	12	11	3	0
10	13	11	6	0	14	2	0	0	14	4	6	0
11	15	4	3	0	15	7	0	0	15	9	9	0
12	16	9	0	0	17	0	0	0	17	3	0	0
13	18	1	9	0	18	5	0	0	18	8	3	0
14	19	6	6	0	19	10	0	0	20	1	6	0
15	20	11	3	0	21	3	0	0	21	6	9	0
16	22	4	0	0	22	8	0	0	23	0	0	0
17	23	8	9	0	24	1	0	0	24	5	3	0
18	25	1	6	0	25	6	0	0	25	10	6	0
19	26	6	3	0	26	11	0	0	27	3	9	0
20	27	11	0	0	28	4	0	0	28	9	0	0
21	29	3	9	0	29	9	0	0	30	2	3	0
22	30	8	6	0	31	2	0	0	31	7	6	0
23	32	1	3	0	32	7	0	0	33	0	9	0
24	33	6	0	0	34	0	0	0	34	6	0	0
25	34	10	9	0	35	5	0	0	35	11	3	0
50	69	9	6	0	70	10	0	0	71	10	6	0
75	104	8	3	0	106	3	0	0	107	9	9	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	4	2	0	0	4	3	0	0	4	3
½	0	0	8	4	0	0	8	6	0	0	8	7
¾	0	1	0	6	0	1	0	9	0	1	0	11
1	0	1	4	9	0	1	5	0	0	1	5	3
2	0	2	9	6	0	2	10	0	0	2	10	6
3	0	4	2	3	0	4	3	0	0	4	3	9
4	0	5	7	0	0	5	8	0	0	5	9	0
5	0	6	11	9	0	7	1	0	0	7	2	3
6	0	8	4	6	0	8	6	0	0	8	7	6
7	0	9	9	3	0	9	11	0	0	10	0	9
8	0	11	2	0	0	11	4	0	0	11	6	0
9	1	0	6	9	1	0	9	0	1	0	11	3
10	1	1	11	6	1	2	2	0	1	2	4	6
11	1	3	4	3	1	3	7	0	1	3	9	9

Feet Long.	17⅛ inches broad.				17⅞ inches broad.				18 inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds	Ft.	In.	Pts.	2ds.
1	1	5	6	0	1	5	9	0	1	6	0	0
2	2	11	0	0	2	11	6	0	3	0	0	0
3	4	4	6	0	4	5	3	0	4	6	0	0
4	5	10	0	0	5	11	0	0	6	0	0	0
5	7	3	6	0	7	4	9	0	7	6	0	0
6	8	9	0	0	8	10	6	0	9	0	0	0
7	10	2	6	0	10	4	3	0	10	6	0	0
8	11	8	0	0	11	10	0	0	12	0	0	0
9	13	1	6	0	13	3	9	0	13	6	0	0
10	14	7	0	0	14	9	6	0	15	0	0	0
11	16	0	6	0	16	3	3	0	16	6	0	0
12	17	6	0	0	17	9	0	0	18	0	0	0
13	18	11	6	0	19	2	9	0	19	6	0	0
14	20	5	0	0	20	8	6	0	21	0	0	0
15	21	10	6	0	22	2	3	0	22	6	0	0
16	23	4	0	0	23	8	0	0	24	0	0	0
17	24	9	6	0	25	1	9	0	25	6	0	0
18	26	3	0	0	26	7	6	0	27	0	0	0
19	27	8	6	0	28	1	3	0	28	6	0	0
20	29	2	0	0	29	7	0	0	30	0	0	0
21	30	7	6	0	31	0	9	0	31	6	0	0
22	32	1	0	0	32	6	6	0	33	0	0	0
23	33	6	6	0	34	0	3	0	34	6	0	0
24	35	0	0	0	35	6	0	0	36	0	0	0
25	36	5	6	0	36	11	9	0	37	6	0	0
50	72	11	0	0	73	11	6	0	75	0	0	0
75	109	4	6	0	110	11	3	0	112	6	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	4	4	0	0	4	5	0	0	4	6
½	0	0	8	9	0	0	8	10	0	0	9	0
¾	0	1	1	1	0	1	1	3	0	1	1	6
1	0	1	5	6	0	1	5	9	0	1	6	0
2	0	2	11	0	0	2	11	6	0	3	0	0
3	0	4	4	6	0	4	5	3	0	4	6	0
4	0	5	10	0	0	5	11	0	0	6	0	0
5	0	7	3	6	0	7	4	9	0	7	6	0
6	0	8	9	0	0	8	10	6	0	9	0	0
7	0	10	2	6	0	10	4	3	0	10	6	0
8	0	11	8	0	0	11	10	0	1	0	0	0
9	1	1	1	6	1	1	3	9	1	1	6	0
10	1	2	7	0	1	2	9	6	1	3	0	0
11	1	4	0	6	1	4	3	3	1	4	6	0

Feet Long.	18¼ inches broad.				18½ inches broad.				18¾ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	6	3	0	1	6	6	0	1	6	9	0
2	3	0	6	0	3	1	0	0	3	1	6	0
3	4	6	9	0	4	7	6	0	4	8	3	0
4	6	1	0	0	6	2	0	0	6	3	0	0
5	7	7	3	0	7	8	6	0	7	9	9	0
6	9	1	6	0	9	3	0	0	9	4	6	0
7	10	7	9	0	10	9	6	0	10	11	3	0
8	12	2	0	0	12	4	0	0	12	6	0	0
9	13	8	3	0	13	10	6	0	14	0	9	0
10	15	2	6	0	15	5	0	0	15	7	6	0
11	16	8	9	0	16	11	6	0	17	2	3	0
12	18	3	0	0	18	6	0	0	18	9	0	0
13	19	9	3	0	20	0	6	0	20	3	9	0
14	21	3	6	0	21	7	0	0	21	10	6	0
15	22	9	9	0	23	1	6	0	23	5	3	0
16	24	4	0	0	24	8	0	0	25	0	0	0
17	25	10	3	0	26	2	6	0	26	6	9	0
18	27	4	6	0	27	9	0	0	28	1	6	0
19	28	10	9	0	29	3	6	0	29	8	3	0
20	30	5	0	0	30	10	0	0	31	3	0	0
21	31	11	3	0	32	4	6	0	32	9	9	0
22	33	5	6	0	33	11	0	0	34	4	6	0
23	34	11	9	0	35	5	6	0	35	11	3	0
24	36	6	0	0	37	0	0	0	37	6	0	0
25	38	0	3	0	38	6	6	0	39	0	9	0
50	76	0	6	0	77	1	0	0	78	1	6	0
75	114	0	9	0	115	7	6	0	117	2	3	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	4	6	0	0	4	7	0	0	4	8
½	0	0	9	1	0	0	9	3	0	0	9	4
¾	0	1	1	8	0	1	1	10	0	1	2	0
1	0	1	6	3	0	1	6	6	0	1	6	9
2	0	3	0	6	0	3	1	0	0	3	1	6
3	0	4	6	9	0	4	7	6	0	4	8	3
4	0	6	1	0	0	6	2	0	0	6	3	0
5	0	7	7	3	0	7	8	6	0	7	9	9
6	0	9	1	6	0	9	3	0	0	9	4	6
7	0	10	7	9	0	10	9	6	0	10	11	3
8	1	0	2	0	1	0	4	0	1	0	6	0
9	1	1	8	3	1	1	10	6	1	2	0	9
10	1	3	2	6	1	3	5	0	1	3	7	6
11	1	4	8	9	1	4	11	6	1	5	2	3

Feet Long.	19 inches broad.				19½ inches broad.				19½ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	7	0	0	1	7	3	0	1	7	6	0
2	3	2	0	0	3	2	6	0	3	3	0	0
3	4	9	0	0	4	9	9	0	4	10	6	0
4	6	4	0	0	6	5	0	0	6	6	0	0
5	7	11	0	0	8	0	3	0	8	1	6	0
6	9	6	0	0	9	7	6	0	9	9	0	0
7	11	1	0	0	11	2	9	0	11	4	6	0
8	12	8	0	0	12	10	0	0	13	0	0	0
9	14	3	0	0	14	5	3	0	14	7	6	0
10	15	10	0	0	16	0	6	0	16	3	0	0
11	17	5	0	0	17	7	9	0	17	10	6	0
12	19	0	0	0	19	3	0	0	19	6	0	0
13	20	7	0	0	20	10	3	0	21	1	6	0
14	22	2	0	0	22	5	6	0	22	9	0	0
15	23	9	0	0	24	0	9	0	24	4	6	0
16	25	4	0	0	25	8	0	0	26	0	0	0
17	26	11	0	0	27	3	3	0	27	7	6	0
18	28	6	0	0	28	10	6	0	29	3	0	0
19	30	1	0	0	30	5	9	0	30	10	6	0
20	31	8	0	0	32	1	0	0	32	6	0	0
21	33	3	0	0	33	8	3	0	34	1	6	0
22	34	10	0	0	35	3	6	0	35	9	0	0
23	36	5	0	0	36	10	9	0	37	4	6	0
24	38	0	0	0	38	6	0	0	39	0	0	0
25	39	7	0	0	40	1	3	0	40	7	6	0
50	79	2	0	0	80	2	6	0	81	3	0	0
75	118	9	0	0	120	3	9	0	121	10	6	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	4	9	0	0	4	9	0	0	4	10
½	0	0	9	6	0	0	9	7	0	0	9	9
¾	0	1	2	3	0	1	2	5	0	1	2	7
1	0	1	7	0	0	1	7	3	0	1	7	6
2	0	3	2	0	0	3	2	6	0	3	3	0
3	0	4	9	0	0	4	9	9	0	4	10	6
4	0	6	4	0	0	6	5	0	0	6	6	0
5	0	7	11	0	0	8	0	3	0	8	1	6
6	0	9	6	0	0	9	7	6	0	9	9	0
7	0	11	1	0	0	11	2	9	0	11	4	6
8	1	0	8	0	1	0	10	0	1	1	0	0
9	1	2	3	0	1	2	5	3	1	2	7	6
10	1	3	10	0	1	4	0	6	1	4	3	0
11	1	5	5	0	1	5	7	9	1	5	10	6

Feet Long.	19¾ inches broad.				20 inches broad.				20¼ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	7	9	0	1	8	0	0	1	8	3	0
2	3	3	6	0	3	4	0	0	3	4	6	0
3	4	11	3	0	5	0	0	0	5	0	9	0
4	6	7	0	0	6	8	0	0	6	9	0	0
5	8	2	9	0	8	4	0	0	8	5	3	0
6	9	10	6	0	10	0	0	0	10	1	6	0
7	11	6	3	0	11	8	0	0	11	9	9	0
8	13	2	0	0	13	4	0	0	13	6	0	0
9	14	9	9	0	15	0	0	0	15	2	3	0
10	16	5	6	0	16	8	0	0	16	10	6	0
11	18	1	3	0	18	4	0	0	18	6	9	0
12	19	9	0	0	20	0	0	0	20	3	0	0
13	21	4	9	0	21	8	0	0	21	11	3	0
14	23	0	6	0	23	4	0	0	23	7	6	0
15	24	8	3	0	25	0	0	0	25	3	9	0
16	26	4	0	0	26	8	0	0	27	0	0	0
17	27	11	9	0	28	4	0	0	28	8	3	0
18	29	7	6	0	30	0	0	0	30	4	6	0
19	31	3	3	0	31	8	0	0	32	0	9	0
20	32	11	0	0	33	4	0	0	33	9	0	0
21	34	6	9	0	35	0	0	0	35	5	3	0
22	36	2	6	0	36	8	0	0	37	1	6	0
23	37	10	3	0	38	4	0	0	38	9	9	0
24	39	6	0	0	40	0	0	0	40	6	0	0
25	41	1	9	0	41	8	0	0	42	2	3	0
50	82	3	6	0	83	4	0	0	84	4	6	0
75	123	5	3	0	125	0	0	0	126	6	9	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	4	11	0	0	5	0	0	0	5	0
½	0	0	9	10	0	0	10	0	0	0	10	1
¾	0	1	2	9	0	1	3	0	0	1	3	2
1	0	1	7	9	0	1	8	0	0	1	8	3
2	0	3	3	6	0	3	4	0	0	3	4	6
3	0	4	11	3	0	5	0	0	0	5	0	9
4	0	6	7	0	0	6	8	0	0	6	9	0
5	0	8	2	9	0	8	4	0	0	8	5	3
6	0	9	10	6	0	10	0	0	0	10	1	6
7	0	11	6	3	0	11	8	0	0	11	9	9
8	1	1	2	0	1	1	4	0	1	1	6	0
9	1	2	9	9	1	3	0	0	1	3	2	3
10	1	4	5	6	1	4	8	0	1	4	10	6
11	1	6	1	3	1	6	4	0	1	6	6	9

Feet Long.	20½ inches broad.				20¾ inches broad.				21 inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	8	6	0	1	8	9	0	1	9	0	0
2	3	5	0	0	3	5	6	0	3	6	0	0
3	5	1	6	0	5	2	3	0	5	3	0	0
4	6	10	0	0	6	11	0	0	7	0	0	0
5	8	6	6	0	8	7	9	0	8	9	0	0
6	10	3	0	0	10	4	6	0	10	6	0	0
7	11	11	6	0	12	1	3	0	12	3	0	0
8	13	8	0	0	13	10	0	0	14	0	0	0
9	15	4	6	0	15	6	9	0	15	9	0	0
10	17	1	0	0	17	3	6	0	17	6	0	0
11	18	9	6	0	19	0	3	0	19	3	0	0
12	20	6	0	0	20	9	0	0	21	0	0	0
13	22	2	6	0	22	5	9	0	22	9	0	0
14	23	11	0	0	24	2	6	0	24	6	0	0
15	25	7	6	0	25	11	3	0	26	3	0	0
16	27	4	0	0	27	8	0	0	28	0	0	0
17	29	0	6	0	29	4	9	0	29	9	0	0
18	30	9	0	0	31	1	6	0	31	6	0	0
19	32	5	6	0	32	10	3	0	33	3	0	0
20	34	2	0	0	34	7	0	0	35	0	0	0
21	35	10	6	0	36	3	9	0	36	9	0	0
22	37	7	0	0	38	0	6	0	38	6	0	0
23	39	3	6	0	39	9	3	0	40	3	0	0
24	41	0	0	0	41	6	0	0	42	0	0	0
25	42	8	6	0	43	2	9	0	43	9	0	0
50	85	5	0	0	86	5	6	0	87	6	0	0
75	128	1	6	0	129	8	3	0	131	3	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	5	1	0	0	5	2	0	0	5	3
½	0	0	10	3	0	0	10	4	0	0	10	6
¾	0	1	3	4	0	1	3	6	0	1	3	9
1	0	1	8	6	0	1	8	9	0	1	9	0
2	0	3	5	0	0	3	5	6	0	3	6	0
3	0	5	1	6	0	5	2	3	0	5	3	0
4	0	6	10	0	0	6	11	0	0	7	0	0
5	0	8	6	6	0	8	7	9	0	8	9	0
6	0	10	3	0	0	10	4	6	0	10	6	0
7	0	11	11	6	1	0	1	3	1	0	3	0
8	1	1	8	0	1	1	10	0	1	2	0	0
9	1	3	4	6	1	3	6	9	1	3	9	0
10	1	5	1	0	1	5	3	6	1	5	6	0
11	1	6	9	6	1	7	0	3	1	7	3	0

Feet Long.	21½ inches broad.				21⅓ inches broad.				21¾ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	9	3	0	1	9	6	0	1	9	9	0
2	3	6	6	0	3	7	0	0	3	7	6	0
3	5	3	9	0	5	4	6	0	5	5	3	0
4	7	1	0	0	7	2	0	0	7	3	0	0
5	8	10	3	0	8	11	6	0	9	0	9	0
6	10	7	6	0	10	9	0	0	10	10	6	0
7	12	4	9	0	12	6	6	0	12	8	3	0
8	14	2	0	0	14	4	0	0	14	6	0	0
9	15	11	3	0	16	1	6	0	16	3	9	0
10	17	8	6	0	17	11	0	0	18	1	6	0
11	19	5	9	0	19	8	6	0	19	11	3	0
12	21	3	0	0	21	6	0	0	21	9	0	0
13	23	0	3	0	23	3	6	0	23	6	9	0
14	24	9	6	0	25	1	0	0	25	4	6	0
15	26	6	9	0	26	10	6	0	27	2	3	0
16	28	4	0	0	28	8	0	0	29	0	0	0
17	30	1	3	0	30	5	6	0	30	9	9	0
18	31	10	6	0	32	3	0	0	32	7	6	0
19	33	7	9	0	34	0	6	0	34	5	3	0
20	35	5	0	0	35	10	0	0	36	3	0	0
21	37	2	3	0	37	7	6	0	38	0	9	0
22	38	11	6	0	39	5	0	0	39	10	6	0
23	40	8	9	0	41	2	6	0	41	8	3	0
24	42	6	0	0	43	0	0	0	43	6	0	0
25	44	3	3	0	44	9	6	0	45	3	9	0
50	88	6	6	0	89	7	0	0	90	7	6	0
75	132	9	9	0	134	4	6	0	135	11	3	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	5	3	0	0	5	4	0	0	5	5
½	0	0	10	7	0	0	10	9	0	0	10	10
¾	0	1	3	11	0	1	4	1	0	1	4	3
1	0	1	9	3	0	1	9	6	0	1	9	9
2	0	3	6	6	0	3	7	0	0	3	7	6
3	0	5	3	9	0	5	4	6	0	5	5	3
4	0	7	1	0	0	7	2	0	0	7	3	0
5	0	8	10	3	0	8	11	6	0	9	0	9
6	0	10	7	6	0	10	9	0	0	10	10	6
7	1	0	4	9	1	0	6	6	1	0	8	3
8	1	2	2	0	1	2	4	0	1	2	6	0
9	1	3	11	3	1	4	1	6	1	4	3	9
10	1	5	8	6	1	5	11	0	1	6	1	6
11	1	7	5	9	1	7	8	6	1	7	11	3

Feet Long.	22 inches broad.				22¼ inches broad.				22½ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	10	0	0	1	10	3	0	1	10	6	0
2	3	8	0	0	3	8	6	0	3	9	0	0
3	5	6	0	0	5	6	9	0	5	7	6	0
4	7	4	0	0	7	5	0	0	7	6	0	0
5	9	2	0	0	9	3	3	0	9	4	6	0
6	11	0	0	0	11	1	6	0	11	3	0	0
7	12	10	0	0	12	11	9	0	13	1	6	0
8	14	8	0	0	14	10	0	0	15	0	0	0
9	16	6	0	0	16	8	3	0	16	10	6	0
10	18	4	0	0	18	6	6	0	18	9	0	0
11	20	2	0	0	20	4	9	0	20	7	6	0
12	22	0	0	0	22	3	0	0	22	6	0	0
13	23	10	0	0	24	1	3	0	24	4	6	0
14	25	8	0	0	25	11	6	0	26	3	0	0
15	27	6	0	0	27	9	9	0	28	1	6	0
16	29	4	0	0	29	8	0	0	30	0	0	0
17	31	2	0	0	31	6	3	0	31	10	6	0
18	33	0	0	0	33	4	6	0	33	9	0	0
19	34	10	0	0	35	2	9	0	35	7	6	0
20	36	8	0	0	37	1	0	0	37	6	0	0
21	38	6	0	0	38	11	3	0	39	4	6	0
22	40	4	0	0	40	9	6	0	41	3	0	0
23	42	2	0	0	42	7	9	0	43	1	6	0
24	44	0	0	0	44	6	0	0	45	0	0	0
25	45	10	0	0	46	4	3	0	46	10	6	0
50	91	8	0	0	92	8	6	0	93	9	0	0
75	137	6	0	0	139	0	9	0	140	7	6	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	5	6	0	0	5	6	0	0	5	7
½	0	0	11	0	0	0	11	1	0	0	11	3
¾	0	1	4	6	0	1	4	8	0	1	4	10
1	0	1	10	0	0	1	10	3	0	1	10	6
2	0	3	8	0	0	3	8	6	0	3	9	0
3	0	5	6	0	0	5	6	9	0	5	7	6
4	0	7	4	0	0	7	5	0	0	7	6	0
5	0	9	2	0	0	9	3	3	0	9	4	6
6	0	11	0	0	0	11	1	6	0	11	3	0
7	1	0	10	0	1	0	11	9	1	1	1	0
8	1	2	8	0	1	2	10	0	1	3	0	0
9	1	4	6	0	1	4	8	3	1	4	10	6
10	1	6	4	0	1	6	6	6	1	6	9	0
11	1	8	2	0	1	8	4	9	1	8	7	6

Feet Long.	22⅝ inches broad.				23 inches broad.				23¼ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	10	9	0	1	11	0	0	1	11	3	0
2	3	9	6	0	3	10	0	0	3	10	6	0
3	5	8	3	0	5	9	0	0	5	9	9	0
4	7	7	0	0	7	8	0	0	7	9	0	0
5	9	5	9	0	9	7	0	0	9	8	3	0
6	11	4	6	0	11	6	0	0	11	7	6	0
7	13	3	3	0	13	5	0	0	13	6	9	0
8	15	2	0	0	15	4	0	0	15	6	0	0
9	17	0	9	0	17	3	0	0	17	5	3	0
10	18	11	6	0	19	2	0	0	19	4	6	0
11	20	10	3	0	21	1	0	0	21	3	9	0
12	22	9	0	0	23	0	0	0	23	3	0	0
13	24	7	9	0	24	11	0	0	25	2	3	0
14	26	6	6	0	26	10	0	0	27	1	6	0
15	28	5	3	0	28	9	0	0	29	0	9	0
16	30	4	0	0	30	8	0	0	31	0	0	0
17	32	2	9	0	32	7	0	0	32	11	3	0
18	34	1	6	0	34	6	0	0	34	10	6	0
19	36	0	3	0	36	5	0	0	36	9	9	0
20	37	11	0	0	38	4	0	0	38	9	0	0
21	39	9	9	0	40	3	0	0	40	8	3	0
22	41	8	6	0	42	2	0	0	42	7	6	0
23	43	7	3	0	44	1	0	0	44	6	9	0
24	45	6	0	0	46	0	0	0	46	6	0	0
25	47	4	9	0	47	11	0	0	48	5	3	0
50	94	9	6	0	95	10	0	0	96	10	6	0
75	142	2	3	0	143	9	0	0	145	3	9	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	5	8	0	0	5	9	0	0	5	9
½	0	0	11	4	0	0	11	6	0	0	11	7
¾	0	1	5	0	0	1	5	3	0	1	5	5
1	0	1	10	9	0	1	11	0	0	1	11	3
2	0	3	9	6	0	3	10	0	0	3	10	6
3	0	5	8	3	0	5	9	0	0	5	9	9
4	0	7	7	0	0	7	8	0	0	7	9	0
5	0	9	5	9	0	9	7	0	0	9	8	3
6	0	11	4	6	0	11	6	0	0	11	7	6
7	1	1	3	3	1	1	5	0	1	1	6	9
8	1	3	2	0	1	3	4	0	1	3	6	0
9	1	5	0	9	1	5	3	0	1	5	5	3
10	1	6	11	6	1	7	2	0	1	7	4	6
11	1	8	10	3	1	9	1	0	1	9	3	9

Feet Long.	23½ inches broad.				23¾ inches broad.				24 inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	1	11	6	0	1	11	9	0	2	0	0	0
2	3	11	0	0	3	11	6	0	4	0	0	0
3	5	10	6	0	5	11	3	0	6	0	0	0
4	7	10	0	0	7	11	0	0	8	0	0	0
5	9	9	6	0	9	10	9	0	10	0	0	0
6	11	9	0	0	11	10	6	0	12	0	0	0
7	13	8	6	0	13	10	3	0	14	0	0	0
8	15	8	0	0	15	10	0	0	16	0	0	0
9	17	7	6	0	17	9	9	0	18	0	0	0
10	19	7	0	0	19	9	6	0	20	0	0	0
11	21	6	6	0	21	9	3	0	22	0	0	0
12	23	6	0	0	23	9	0	0	24	0	0	0
13	25	5	6	0	25	8	9	0	26	0	0	0
14	27	5	0	0	27	8	6	0	28	0	0	0
15	29	4	6	0	29	8	3	0	30	0	0	0
16	31	4	0	0	31	8	0	0	32	0	0	0
17	33	3	6	0	33	7	9	0	34	0	0	0
18	35	3	0	0	35	7	6	0	36	0	0	0
19	37	2	6	0	37	7	3	0	38	0	0	0
20	39	2	0	0	39	7	0	0	40	0	0	0
21	41	1	6	0	41	6	9	0	42	0	0	0
22	43	1	0	0	43	6	6	0	44	0	0	0
23	45	0	6	0	45	6	3	0	46	0	0	0
24	47	0	0	0	47	6	0	0	48	0	0	0
25	48	11	6	0	49	5	9	0	50	0	0	0
50	97	11	0	0	98	11	6	0	100	0	0	0
75	146	10	6	0	148	5	3	0	150	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	5	10	0	0	5	11	0	0	6	0
½	0	0	11	9	0	0	11	10	0	1	0	0
¾	0	1	5	7	0	1	5	9	0	1	6	0
1	0	1	11	6	0	1	11	9	0	2	0	0
2	0	3	11	0	0	3	11	6	0	4	0	0
3	0	5	10	6	0	5	11	3	0	6	0	0
4	0	7	10	0	0	7	11	0	0	8	0	0
5	0	9	9	6	0	9	10	9	0	10	0	0
6	0	11	9	0	0	11	10	6	1	0	0	0
7	1	1	8	6	1	1	10	3	1	2	0	0
8	1	3	8	0	1	3	10	0	1	4	0	0
9	1	5	7	6	1	5	9	9	1	6	0	0
10	1	7	7	0	1	7	9	6	1	8	0	0
11	1	9	6	6	1	9	9	3	1	10	0	0

Feet Long.	24¼ inches broad.				24½ inches broad.				24¾ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	0	3	0	2	0	6	0	2	0	9	0
2	4	0	6	0	4	1	0	0	4	1	6	0
3	6	0	9	0	6	1	6	0	6	2	3	0
4	8	1	0	0	8	2	0	0	8	3	0	0
5	10	1	3	0	10	2	6	0	10	3	9	0
6	12	1	6	0	12	3	0	0	12	4	6	0
7	14	1	9	0	14	3	6	0	14	5	3	0
8	16	2	0	0	16	4	0	0	16	6	0	0
9	18	2	3	0	18	4	6	0	18	6	9	0
10	20	2	6	0	20	5	0	0	20	7	6	0
11	22	2	9	0	22	5	6	0	22	8	3	0
12	24	3	0	0	24	6	0	0	24	9	0	0
13	26	3	3	0	26	6	6	0	26	9	9	0
14	28	3	6	0	28	7	0	0	28	10	6	0
15	30	3	9	0	30	7	6	0	30	11	3	0
16	32	4	0	0	32	8	0	0	33	0	0	0
17	34	4	3	0	34	8	6	0	35	0	9	0
18	36	4	6	0	36	9	0	0	37	1	6	0
19	38	4	9	0	38	9	6	0	39	2	3	0
20	40	5	0	0	40	10	0	0	41	3	0	0
21	42	5	3	0	42	10	6	0	43	3	9	0
22	44	5	6	0	44	11	0	0	45	4	6	0
23	46	5	9	0	46	11	6	0	47	5	3	0
24	48	6	0	0	49	0	0	0	49	6	0	0
25	50	6	3	0	51	0	6	0	51	6	9	0
50	101	0	6	0	102	1	0	0	103	1	6	0
75	151	6	9	0	153	1	6	0	154	8	3	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	6	0	0	0	6	1	0	0	6	2
⅜	0	1	0	1	0	1	0	3	0	1	0	4
¾	0	1	6	2	0	1	6	4	0	1	6	6
1	0	2	0	3	0	2	0	6	0	2	0	9
2	0	4	0	6	0	4	1	0	0	4	1	6
3	0	6	0	9	0	6	1	6	0	6	2	3
4	0	8	1	0	0	8	2	0	0	8	3	0
5	0	10	1	3	0	10	2	6	0	10	3	9
6	1	0	1	6	1	0	3	0	1	0	4	6
7	1	2	1	9	1	2	3	6	1	2	5	3
8	1	4	2	0	1	4	4	0	1	4	6	0
9	1	6	2	3	1	6	4	6	1	6	6	9
10	1	8	2	6	1	8	5	0	1	8	7	6
11	1	10	2	9	1	10	5	6	1	10	8	3

Feet Long.	25 inches broad.				25¼ inches broad.				25½ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	1	0	0	2	1	3	0	2	1	6	0
2	4	2	0	0	4	2	6	0	4	3	0	0
3	6	3	0	0	6	3	9	0	6	4	6	0
4	8	4	0	0	8	5	0	0	8	6	0	0
5	10	5	0	0	10	6	3	0	10	7	6	0
6	12	6	0	0	12	7	6	0	12	9	0	0
7	14	7	0	0	14	8	9	0	14	10	6	0
8	16	8	0	0	16	10	0	0	17	0	0	0
9	18	9	0	0	18	11	3	0	19	1	6	0
10	20	10	0	0	21	0	6	0	21	3	0	0
11	22	11	0	0	23	1	9	0	23	4	6	0
12	25	0	0	0	25	3	0	0	25	6	0	0
13	27	1	0	0	27	4	3	0	27	7	6	0
14	29	2	0	0	29	5	6	0	29	9	0	0
15	31	3	0	0	31	6	9	0	31	10	6	0
16	33	4	0	0	33	8	0	0	34	0	0	0
17	35	5	0	0	35	9	3	0	36	1	6	0
18	37	6	0	0	37	10	6	0	38	3	0	0
19	39	7	0	0	39	11	9	0	40	4	6	0
20	41	8	0	0	42	1	0	0	42	6	0	0
21	43	9	0	0	44	2	3	0	44	7	6	0
22	45	10	0	0	46	3	6	0	46	9	0	0
23	47	11	0	0	48	4	9	0	48	10	6	0
24	50	0	0	0	50	6	0	0	51	0	0	0
25	52	1	0	0	52	7	3	0	53	1	6	0
50	104	2	0	0	105	2	6	0	106	3	0	0
75	156	3	0	0	157	9	9	0	159	4	6	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	6	3	0	0	6	3	0	0	6	4
½	0	1	0	6	0	1	0	7	0	1	0	9
¾	0	1	6	9	0	1	6	11	0	1	7	1
1	0	2	1	0	0	2	1	3	0	2	1	6
2	0	4	2	0	0	4	2	6	0	4	3	0
3	0	6	3	0	0	6	3	9	0	6	4	6
4	0	8	4	0	0	8	5	0	0	8	6	0
5	0	10	5	0	0	10	6	3	0	10	7	6
6	1	0	6	0	1	0	7	6	1	0	9	0
7	1	2	7	0	1	2	8	9	1	2	10	6
8	1	4	8	0	1	4	10	0	1	5	0	0
9	1	6	9	0	1	6	11	3	1	7	1	6
10	1	8	10	0	1	9	0	6	1	9	3	0
11	1	10	11	0	1	11	1	9	1	11	4	6

Feet Long.	25¾ inches broad.				26 inches broad.				26¼ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	1	9	0	2	2	0	0	2	2	3	0
2	4	3	6	0	4	4	0	0	4	4	6	0
3	6	5	3	0	6	6	0	0	6	6	9	0
4	8	7	0	0	8	8	0	0	8	9	0	0
5	10	8	9	0	10	10	0	0	10	11	3	0
6	12	10	6	0	13	0	0	0	13	1	6	0
7	15	0	3	0	15	2	0	0	15	3	9	0
8	17	2	0	0	17	4	0	0	17	6	0	0
9	19	3	9	0	19	6	0	0	19	8	3	0
10	21	5	6	0	21	8	0	0	21	10	6	0
11	23	7	3	0	23	10	0	0	24	0	9	0
12	25	9	0	0	26	0	0	0	26	3	0	0
13	27	10	9	0	28	2	0	0	28	5	3	0
14	30	0	6	0	30	4	0	0	30	7	6	0
15	32	2	3	0	32	6	0	0	32	9	9	0
16	34	4	0	0	34	8	0	0	35	0	0	0
17	36	5	9	0	36	10	0	0	37	2	3	0
18	38	7	6	0	39	0	0	0	39	4	6	0
19	40	9	3	0	41	2	0	0	41	6	9	0
20	42	11	0	0	43	4	0	0	43	9	0	0
21	45	0	9	0	45	6	0	0	45	11	3	0
22	47	2	6	0	47	8	0	0	48	1	6	0
23	49	4	3	0	49	10	0	0	50	3	9	0
24	51	6	0	0	52	0	0	0	52	6	0	0
25	53	7	9	0	54	2	0	0	54	8	3	0
50	107	3	6	0	108	4	0	0	109	4	6	0
75	160	11	3	0	162	6	0	0	164	0	9	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	6	5	0	0	6	6	0	0	6	6
½	0	1	0	10	0	1	1	0	0	1	1	1
¾	0	1	7	3	0	1	7	6	0	1	7	8
1	0	2	1	9	0	2	2	0	0	2	2	3
2	0	4	3	6	0	4	4	0	0	4	4	6
3	0	6	5	3	0	6	6	0	0	6	6	9
4	0	8	7	0	0	8	8	0	0	8	9	0
5	0	10	8	9	0	10	10	0	0	10	11	3
6	1	0	10	6	1	1	0	0	1	1	1	6
7	1	3	3	3	1	3	2	0	1	3	3	9
8	1	5	2	0	1	5	4	0	1	5	6	0
9	1	7	3	9	1	7	6	0	1	7	8	3
10	1	9	5	6	1	9	8	0	1	9	10	6
11	1	11	7	3	1	11	10	0	2	0	0	9

Feet Long.	26½ inches broad.				26¾ inches broad.				27 inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	2	6	0	2	2	9	0	2	3	0	0
2	4	5	0	0	4	5	6	0	4	6	0	0
3	6	7	6	0	6	8	3	0	6	9	0	0
4	8	10	0	0	8	11	0	0	9	0	0	0
5	11	0	6	0	11	1	9	0	11	3	0	0
6	13	3	0	0	13	4	6	0	13	6	0	0
7	15	5	6	0	15	7	3	0	15	9	0	0
8	17	8	0	0	17	10	0	0	18	0	0	0
9	19	10	6	0	20	0	9	0	20	3	0	0
10	22	1	0	0	22	3	6	0	22	6	0	0
11	24	3	6	0	24	6	3	0	24	9	0	0
12	26	6	0	0	26	9	0	0	27	0	0	0
13	28	8	6	0	28	11	9	0	29	3	0	0
14	30	11	0	0	31	2	6	0	31	6	0	0
15	33	1	6	0	33	5	3	0	33	9	0	0
16	35	4	0	0	35	8	0	0	36	0	0	0
17	37	6	6	0	37	10	9	0	38	3	0	0
18	39	9	0	0	40	1	6	0	40	6	0	0
19	41	11	6	0	42	4	3	0	42	9	0	0
20	44	2	0	0	44	7	0	0	45	0	0	0
21	46	4	6	0	46	9	9	0	47	3	0	0
22	48	7	0	0	49	0	6	0	49	6	0	0
23	50	9	6	0	51	3	3	0	51	9	0	0
24	53	0	0	0	53	6	0	0	54	0	0	0
25	55	2	6	0	55	8	9	0	56	3	0	0
50	110	5	0	0	111	5	6	0	112	6	0	0
75	165	7	6	0	167	2	3	0	168	9	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	6	7	0	0	6	8	0	0	6	9
½	0	1	1	3	0	1	1	4	0	1	1	6
¾	0	1	7	10	0	1	8	0	0	1	8	3
1	0	2	2	6	0	2	2	9	0	2	3	0
2	0	4	5	0	0	4	5	6	0	4	6	0
3	0	6	7	6	0	6	8	3	0	6	9	0
4	0	8	10	0	0	8	11	0	0	9	0	0
5	0	11	0	6	0	11	1	9	0	11	3	0
6	1	1	3	0	1	1	4	6	1	1	6	0
7	1	3	5	6	1	3	7	3	1	3	9	0
8	1	5	8	0	1	5	10	0	1	6	0	0
9	1	7	10	6	1	8	0	9	1	8	3	0
10	1	10	1	0	1	10	3	6	1	10	6	0
11	2	0	3	6	2	0	6	3	2	0	9	0

Feet Long.	27¼ inches broad.				27½ inches broad.				27¾ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	3	3	0	2	3	6	0	2	3	9	0
2	4	6	6	0	4	7	0	0	4	7	6	0
3	6	9	9	0	6	10	6	0	6	11	3	0
4	9	1	0	0	9	2	0	0	9	3	0	0
5	11	4	3	0	11	5	6	0	11	6	9	0
6	13	7	6	0	13	9	0	0	13	10	6	0
7	15	10	9	0	16	0	6	0	16	2	3	0
8	18	2	0	0	18	4	0	0	18	6	0	0
9	20	5	3	0	20	7	6	0	20	9	9	0
10	22	8	6	0	22	11	0	0	23	1	6	0
11	24	11	9	0	25	2	6	0	25	5	3	0
12	27	3	0	0	27	6	0	0	27	9	0	0
13	29	6	3	0	29	9	6	0	30	0	9	0
14	31	9	6	0	32	1	0	0	32	4	6	0
15	34	0	9	0	34	4	6	0	34	8	3	0
16	36	4	0	0	36	8	0	0	37	0	0	0
17	38	7	3	0	38	11	6	0	39	3	9	0
18	40	10	6	0	41	3	0	0	41	7	6	0
19	43	1	9	0	43	6	6	0	43	11	3	0
20	45	5	0	0	45	10	0	0	46	3	0	0
21	47	8	3	0	48	1	6	0	48	6	9	0
22	49	11	6	0	50	5	0	0	50	10	6	0
23	52	2	9	0	52	8	6	0	53	2	3	0
24	54	6	0	0	55	0	0	0	55	6	0	0
25	56	9	3	0	57	3	6	0	57	9	9	0
50	113	6	6	0	114	7	0	0	115	7	6	0
75	170	3	9	0	171	10	6	0	173	5	3	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	6	9	0	0	6	10	0	0	6	11
½	0	1	1	7	0	1	1	9	0	1	1	10
¾	0	1	8	5	0	1	8	7	0	1	8	9
1	0	2	3	3	0	2	3	6	0	2	3	9
2	0	4	6	6	0	4	7	0	0	4	7	6
3	0	6	9	9	0	6	10	6	0	6	11	3
4	0	9	1	0	0	9	2	0	0	9	3	0
5	0	11	4	3	0	11	5	6	0	11	6	9
6	1	1	7	6	1	1	9	0	1	1	10	6
7	1	3	10	9	1	4	0	6	1	4	2	3
8	1	6	2	0	1	6	4	0	1	6	6	0
9	1	8	5	3	1	8	7	6	1	8	9	9
10	1	10	8	6	1	10	11	0	1	11	1	6
11	2	0	11	9	2	1	2	6	2	1	5	3

Feet Long.	28 inches broad.				28¼ inches broad.				28⅓ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	4	0	0	2	4	3	0	2	4	6	0
2	4	8	0	0	4	8	6	0	4	9	0	0
3	7	0	0	0	7	0	9	0	7	1	6	0
4	9	4	0	0	9	5	0	0	9	6	0	0
5	11	8	0	0	11	9	3	0	11	10	6	0
6	14	0	0	0	14	1	6	0	14	3	0	0
7	16	4	0	0	16	5	9	0	16	7	6	0
8	18	8	0	0	18	10	0	0	19	0	0	0
9	21	0	0	0	21	2	3	0	21	4	6	0
10	23	4	0	0	23	6	6	0	23	9	0	0
11	25	8	0	0	25	10	9	0	26	1	6	0
12	28	0	0	0	28	3	0	0	28	6	0	0
13	30	4	0	0	30	7	3	0	30	10	6	0
14	32	8	0	0	32	11	6	0	33	3	0	0
15	35	0	0	0	35	3	9	0	35	7	6	0
16	37	4	0	0	37	8	0	0	38	0	0	0
17	39	8	0	0	40	0	3	0	40	4	6	0
18	42	0	0	0	42	4	6	0	42	9	0	0
19	44	4	0	0	44	8	9	0	45	1	6	0
20	46	8	0	0	47	1	0	0	47	6	0	0
21	49	0	0	0	49	5	3	0	49	10	6	0
22	51	4	0	0	51	9	6	0	52	3	0	0
23	53	8	0	0	54	1	9	0	54	7	6	0
24	56	0	0	0	56	6	0	0	57	0	0	0
25	58	4	0	0	58	10	3	0	59	4	6	0
50	116	8	0	0	117	8	6	0	118	9	0	0
75	175	0	0	0	176	6	9	0	178	1	6	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	7	0	0	0	7	0	0	0	7	1
½	0	1	2	0	0	1	2	1	0	1	2	3
¾	0	1	9	0	0	1	9	2	0	1	9	4
1	0	2	4	0	0	2	4	3	0	2	4	6
2	0	4	8	0	0	4	8	6	0	4	9	0
3	0	7	0	0	0	7	0	9	0	7	1	6
4	0	9	4	0	0	9	5	0	0	9	6	0
5	0	11	8	0	0	11	9	3	0	11	10	6
6	1	2	0	0	1	2	1	6	1	2	3	0
7	1	4	4	0	1	4	5	9	1	4	7	6
8	1	6	8	0	1	6	10	0	1	7	0	0
9	1	9	0	0	1	9	2	3	1	9	4	6
10	1	11	4	0	1	11	6	6	1	11	9	0
11	2	1	8	0	2	1	10	9	2	2	1	6

Feet Long.	28¾ inches broad.				29 inches broad.				29½ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	4	9	0	2	5	0	0	2	5	3	0
2	4	9	6	0	4	10	0	0	4	10	6	0
3	7	2	3	0	7	3	0	0	7	3	9	0
4	9	7	0	0	9	8	0	0	9	9	0	0
5	11	11	9	0	12	1	0	0	12	2	3	0
6	14	4	6	0	14	6	0	0	14	7	6	0
7	16	9	3	0	16	11	0	0	17	0	9	0
8	19	2	0	0	19	4	0	0	19	6	0	0
9	21	6	9	0	21	9	0	0	21	11	3	0
10	23	11	6	0	24	2	0	0	24	4	6	0
11	26	4	3	0	26	7	0	0	26	9	9	0
12	28	9	0	0	29	0	0	0	29	3	0	0
13	31	1	9	0	31	5	0	0	31	8	3	0
14	33	6	6	0	33	10	0	0	34	1	6	0
15	35	11	3	0	36	3	0	0	36	6	9	0
16	38	4	0	0	38	8	0	0	39	0	0	0
17	40	8	9	0	41	1	0	0	41	5	3	0
18	43	1	6	0	43	6	0	0	43	10	6	0
19	45	6	3	0	45	11	0	0	46	3	9	0
20	47	11	0	0	48	4	0	0	48	9	0	0
21	50	3	9	0	50	9	0	0	51	2	3	0
22	52	8	6	0	53	2	0	0	53	7	6	0
23	55	1	3	0	55	7	0	0	56	0	9	0
24	57	6	0	0	58	0	0	0	58	6	0	0
25	59	10	9	0	60	5	0	0	60	11	3	0
50	119	9	6	0	120	10	0	0	121	10	6	0
75	179	8	3	0	181	3	0	0	182	9	9	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	7	2	0	0	7	3	0	0	7	3
½	0	1	2	4	0	1	2	6	0	1	2	7
¾	0	1	9	6	0	1	9	9	0	1	9	11
1	0	2	4	9	0	2	5	0	0	2	5	3
2	0	4	9	6	0	4	10	0	0	4	10	6
3	0	7	2	3	0	7	3	0	0	7	3	9
4	0	9	7	0	0	9	8	0	0	9	9	0
5	0	11	11	9	1	0	1	0	1	0	2	3
6	1	2	4	6	1	2	6	0	1	2	7	6
7	1	4	9	3	1	4	11	0	1	5	0	9
8	1	7	2	0	1	7	4	0	1	7	6	0
9	1	9	6	9	1	9	9	0	1	9	11	3
10	1	11	11	6	2	0	2	0	2	0	4	6
11	2	2	4	3	2	2	7	0	2	2	9	9

Feet Long.	29½ inches broad.				29⅝ inches broad.				30 inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	5	6	0	2	5	9	0	2	6	0	0
2	4	11	0	0	4	11	6	0	5	0	0	0
3	7	4	6	0	7	5	3	0	7	6	0	0
4	9	10	0	0	9	11	0	0	10	0	0	0
5	12	3	6	0	12	4	9	0	12	6	0	0
6	14	9	0	0	14	10	6	0	15	0	0	0
7	17	2	6	0	17	4	3	0	17	6	0	0
8	19	8	0	0	19	10	0	0	20	0	0	0
9	22	1	6	0	22	3	9	0	22	6	0	0
10	24	7	0	0	24	9	6	0	25	0	0	0
11	27	0	6	0	27	3	3	0	27	6	0	0
12	29	6	0	0	29	9	0	0	30	0	0	0
13	31	11	6	0	32	2	9	0	32	6	0	0
14	34	5	0	0	34	8	6	0	35	0	0	0
15	36	10	6	0	37	2	3	0	37	6	0	0
16	39	4	0	0	39	8	0	0	40	0	0	0
17	41	9	6	0	42	1	9	0	42	6	0	0
18	44	3	0	0	44	7	6	0	45	0	0	0
19	46	8	6	0	47	1	3	0	47	6	0	0
20	49	2	0	0	49	7	0	0	50	0	0	0
21	51	7	6	0	52	0	9	0	52	6	0	0
22	54	1	0	0	54	6	6	0	55	0	0	0
23	56	6	6	0	57	0	3	0	57	6	0	0
24	59	0	0	0	59	6	0	0	60	0	0	0
25	61	5	6	0	61	11	9	0	62	6	0	0
50	122	11	0	0	123	11	6	0	125	0	0	0
75	184	4	6	0	185	11	3	0	187	6	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	7	4	0	0	7	5	0	0	7	6
½	0	1	2	9	0	1	2	10	0	1	3	0
¾	0	1	10	1	0	1	10	3	0	1	10	6
1	0	2	5	6	0	2	5	9	0	2	6	0
2	0	4	11	0	0	4	11	6	0	5	0	0
3	0	7	4	6	0	7	5	3	0	7	6	0
4	0	9	10	0	0	9	11	0	0	10	0	0
5	1	0	3	6	1	0	4	9	1	0	6	0
6	1	2	9	0	1	2	10	6	1	3	0	0
7	1	5	2	6	1	5	4	3	1	5	6	0
8	1	7	8	0	1	7	10	0	1	8	0	0
9	1	10	1	6	1	10	3	9	1	10	6	0
10	2	0	7	0	2	0	9	6	2	1	0	0
11	2	3	0	6	2	3	3	3	2	3	6	0

Feet Long.	30¼ Inches broad.				30½ inches broad.				30¾ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	6	3	0	2	6	6	0	2	6	9	0
2	5	0	6	0	5	1	0	0	5	1	6	0
3	7	6	9	0	7	7	6	0	7	8	3	0
4	10	1	0	0	10	2	0	0	10	3	0	0
5	12	7	3	0	12	8	6	0	12	9	9	0
6	15	1	6	0	15	3	0	0	15	4	6	0
7	17	7	9	0	17	9	6	0	17	11	3	0
8	20	2	0	0	20	4	0	0	20	6	0	0
9	22	8	3	0	22	10	6	0	23	0	9	0
10	25	2	6	0	25	5	0	0	25	7	6	0
11	27	8	9	0	27	11	6	0	28	2	3	0
12	30	3	0	0	30	6	0	0	30	9	0	0
13	32	9	3	0	33	0	6	0	33	3	9	0
14	35	3	6	0	35	7	0	0	35	10	6	0
15	37	9	9	0	38	1	6	0	38	5	3	0
16	40	4	0	0	40	8	0	0	41	0	0	0
17	42	10	3	0	43	2	6	0	43	6	9	0
18	45	4	6	0	45	9	0	0	46	1	6	0
19	47	10	9	0	48	3	6	0	48	8	3	0
20	50	5	0	0	50	10	0	0	51	3	0	0
21	52	11	3	0	53	4	6	0	53	9	9	0
22	55	5	6	0	55	11	0	0	56	4	6	0
23	57	11	9	0	58	5	6	0	58	11	3	0
24	60	6	0	0	61	0	0	0	61	6	0	0
25	63	0	3	0	63	6	6	0	64	0	9	0
50	126	0	6	0	127	1	0	0	128	1	6	0
75	189	0	9	0	190	7	6	0	192	2	3	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	7	6	0	0	7	7	0	0	7	8
½	0	1	3	1	0	1	3	3	0	1	3	4
¾	0	1	10	8	0	1	10	10	0	1	11	0
1	0	2	6	3	0	2	6	6	0	2	6	9
2	0	5	0	6	0	5	1	0	0	5	1	6
3	0	7	6	9	0	7	7	6	0	7	8	3
4	0	10	1	0	0	10	2	0	0	10	3	0
5	1	0	7	3	1	0	8	6	1	0	9	9
6	1	3	1	6	1	3	3	0	1	3	4	6
7	1	5	7	9	1	5	9	6	1	5	11	3
8	1	8	2	0	1	8	4	0	1	8	6	0
9	1	10	8	3	1	10	10	6	1	11	0	9
10	2	1	2	6	2	1	5	0	2	1	7	6
11	2	3	8	9	2	3	11	6	2	4	2	3

Feet Long.	31 inches broad.				31½ inches broad.				31⅓ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	7	0	0	2	7	3	0	2	7	6	0
2	5	2	0	0	5	2	6	0	5	3	0	0
3	7	9	0	0	7	9	9	0	7	10	6	0
4	10	4	0	0	10	5	0	0	10	6	0	0
5	12	11	0	0	13	0	3	0	13	1	6	0
6	15	6	0	0	15	7	6	0	15	9	0	0
7	18	1	0	0	18	2	9	0	18	4	6	0
8	20	8	0	0	20	10	0	0	21	0	0	0
9	23	3	0	0	23	5	3	0	23	7	6	0
10	25	10	0	0	26	0	6	0	26	3	0	0
11	28	5	0	0	28	7	9	0	28	10	6	0
12	31	0	0	0	31	3	0	0	31	6	0	0
13	33	7	0	0	33	10	3	0	34	1	6	0
14	36	2	0	0	36	5	6	0	36	9	0	0
15	38	9	0	0	39	0	9	0	39	4	6	0
16	41	4	0	0	41	8	0	0	42	0	0	0
17	43	11	0	0	44	3	3	0	44	7	6	0
18	46	6	0	0	46	10	6	0	47	3	0	0
19	49	1	0	0	49	5	9	0	49	10	6	0
20	51	8	0	0	52	1	0	0	52	6	0	0
21	54	3	0	0	54	8	3	0	55	1	6	0
22	56	10	0	0	57	3	6	0	57	9	0	0
23	59	5	0	0	59	10	9	0	60	4	6	0
24	62	0	0	0	62	6	0	0	63	0	0	0
25	64	7	0	0	65	1	3	0	65	7	6	0
50	129	2	0	0	130	2	6	0	131	3	0	0
75	193	9	0	0	195	3	9	0	196	10	6	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	7	9	0	0	7	9	0	0	7	10
½	0	1	3	6	0	1	3	7	0	1	3	9
¾	0	1	11	3	0	1	11	5	0	1	11	7
1	0	2	7	0	0	2	7	3	0	2	7	6
2	0	5	2	0	0	5	2	6	0	5	3	0
3	0	7	9	0	0	7	9	9	0	7	10	6
4	0	10	4	0	0	10	5	0	0	10	6	0
5	1	0	11	0	1	1	0	3	1	1	1	6
6	1	3	6	0	1	3	7	6	1	3	9	0
7	1	6	1	0	1	6	2	9	1	6	4	6
8	1	8	8	0	1	8	10	0	1	9	0	0
9	1	11	3	0	1	11	5	3	1	11	7	6
10	2	1	10	0	2	2	0	6	2	2	3	0
11	2	4	5	0	2	4	7	9	2	4	10	6

Feet Long.	31¾ inches broad.				32 inches broad.				32¼ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	7	9	0	2	8	0	0	2	8	3	0
2	5	3	6	0	5	4	0	0	5	4	6	0
3	7	11	3	0	8	0	0	0	8	0	9	0
4	10	7	0	0	10	8	0	0	10	9	0	0
5	13	2	9	0	13	4	0	0	13	5	3	0
6	15	10	6	0	16	0	0	0	16	1	6	0
7	18	6	3	0	18	8	0	0	18	9	9	0
8	21	2	0	0	21	4	0	0	21	6	0	0
9	23	9	9	0	24	0	0	0	24	2	3	0
10	26	5	6	0	26	8	0	0	26	10	6	0
11	29	1	3	0	29	4	0	0	29	6	9	0
12	31	9	0	0	32	0	0	0	32	3	0	0
13	34	4	9	0	34	8	0	0	34	11	3	0
14	37	0	6	0	37	4	0	0	37	7	6	0
15	39	8	3	0	40	0	0	0	40	3	9	0
16	42	4	0	0	42	8	0	0	43	0	0	0
17	44	11	9	0	45	4	0	0	45	8	3	0
18	47	7	6	0	48	0	0	0	48	4	6	0
19	50	3	3	0	50	8	0	0	51	0	9	0
20	52	11	0	0	53	4	0	0	53	9	0	0
21	55	6	9	0	56	0	0	0	56	5	3	0
22	58	2	6	0	58	8	0	0	59	1	6	0
23	60	10	3	0	61	4	0	0	61	9	9	0
24	63	6	0	0	64	0	0	0	64	6	0	0
25	66	1	9	0	66	8	0	0	67	2	3	0
50	132	3	6	0	133	4	0	0	134	4	6	0
75	198	5	3	0	200	0	0	0	201	6	9	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	7	11	0	0	8	0	0	0	8	0
½	0	1	3	10	0	1	4	0	0	1	4	1
¾	0	1	11	9	0	2	0	0	0	2	0	2
1	0	2	7	9	0	2	8	0	0	2	8	3
2	0	5	3	6	0	5	4	0	0	5	4	6
3	0	7	11	3	0	8	0	0	0	8	0	9
4	0	10	7	0	0	10	8	0	0	0	9	0
5	1	1	2	9	1	1	4	0	1	1	5	3
6	1	3	10	6	1	4	0	0	1	4	1	6
7	1	6	6	3	1	6	8	0	1	0	9	9
8	1	9	2	0	1	9	4	0	1	9	6	0
9	1	11	9	9	2	0	0	0	2	0	2	3
10	2	2	5	6	2	2	8	0	2	2	10	6
11	2	5	1	3	2	5	4	0	2	5	6	9

Feet Long.	32½ inches broad.				32¾ inches broad.				33 inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	8	6	0	2	8	9	0	2	9	0	0
2	5	5	0	0	5	5	6	0	5	6	0	0
3	8	1	6	0	8	2	3	0	8	3	0	0
4	10	10	0	0	10	11	0	0	11	0	0	0
5	13	6	6	0	13	7	9	0	13	9	0	0
6	16	3	0	0	16	4	6	0	16	6	0	0
7	18	11	6	0	19	1	3	0	19	3	0	0
8	21	8	0	0	21	10	0	0	22	0	0	0
9	24	4	6	0	24	6	9	0	24	9	0	0
10	27	1	0	0	27	3	6	0	27	6	0	0
11	29	9	6	0	30	0	3	0	30	3	0	0
12	32	6	0	0	32	9	0	0	33	0	0	0
13	35	2	6	0	35	5	9	0	35	9	0	0
14	37	11	0	0	38	2	6	0	38	6	0	0
15	40	7	6	0	40	11	3	0	41	3	0	0
16	43	4	0	0	43	8	0	0	44	0	0	0
17	46	0	6	0	46	4	9	0	46	9	0	0
18	48	9	0	0	49	1	6	0	49	6	0	0
19	51	5	6	0	51	10	3	0	52	3	0	0
20	54	2	0	0	54	7	0	0	55	0	0	0
21	56	10	6	0	57	3	9	0	57	9	0	0
22	59	7	0	0	60	0	6	0	60	6	0	0
23	62	3	6	0	62	9	3	0	63	3	0	0
24	65	0	0	0	65	6	0	0	66	0	0	0
25	67	8	6	0	68	2	9	0	68	9	0	0
50	135	5	0	0	136	5	6	0	137	6	0	0
75	203	1	6	0	204	8	3	0	206	3	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	8	1	0	0	8	2	0	0	8	3
½	0	1	4	3	0	1	4	4	0	1	4	6
¾	0	2	0	4	0	2	0	6	0	2	0	9
1	0	2	8	6	0	2	8	9	0	2	9	0
2	0	5	5	0	0	5	5	6	0	5	6	0
3	0	8	1	6	0	8	2	3	0	8	3	0
4	0	10	10	0	0	10	11	0	0	11	0	0
5	1	1	6	6	1	1	7	9	1	1	9	0
6	1	4	3	0	1	4	4	6	1	4	6	0
7	1	6	11	6	1	7	1	3	1	7	3	0
8	1	9	8	0	1	9	10	0	1	10	0	0
9	2	0	4	6	2	0	6	9	2	0	9	0
10	2	3	1	0	2	3	3	6	2	3	6	0
11	2	5	9	6	2	6	0	3	2	6	3	0

Feet Long.	33¼ inches broad.				33½ inches broad.				33¾ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	9	3	0	2	9	6	0	2	9	9	0
2	5	6	6	0	5	7	0	0	5	7	6	0
3	8	3	9	0	8	4	6	0	8	5	3	0
4	11	1	0	0	11	2	0	0	11	3	0	0
5	13	10	3	0	13	11	6	0	14	0	9	0
6	16	7	6	0	16	9	0	0	16	10	6	0
7	19	4	9	0	19	6	6	0	19	8	3	0
8	22	2	0	0	22	4	0	0	22	6	0	0
9	24	11	3	0	25	1	6	0	25	3	9	0
10	27	8	6	0	27	11	0	0	28	1	6	0
11	30	5	9	0	30	8	6	0	30	11	3	0
12	33	3	0	0	33	6	0	0	33	9	0	0
13	36	0	3	0	36	3	6	0	36	6	9	0
14	38	9	6	0	39	1	0	0	39	4	6	0
15	41	6	9	0	41	10	6	0	42	2	3	0
16	44	4	0	0	44	8	0	0	45	0	0	0
17	47	1	3	0	47	5	6	0	47	9	9	0
18	49	10	6	0	50	3	0	0	50	7	6	0
19	52	7	9	0	53	0	6	0	53	5	3	0
20	55	5	0	0	55	10	0	0	56	3	0	0
21	58	2	3	0	58	7	6	0	59	0	9	0
22	60	11	6	0	61	5	0	0	61	10	6	0
23	63	8	9	0	64	2	6	0	64	8	3	0
24	66	6	0	0	67	0	0	0	67	6	0	0
25	69	3	3	0	69	9	6	0	70	3	9	0
50	138	6	6	0	139	7	0	0	140	7	6	0
75	207	9	9	0	209	4	6	0	210	11	3	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	8	3	0	0	8	4	0	0	8	5
½	0	1	4	7	0	1	4	9	0	1	4	10
¾	0	2	0	11	0	2	1	1	0	2	1	3
1	0	2	9	3	0	2	9	6	0	2	9	9
2	0	5	6	6	0	5	7	0	0	5	7	6
3	0	8	3	9	0	8	4	6	0	8	5	3
4	0	11	1	0	0	11	2	0	0	11	3	0
5	1	1	10	3	1	1	11	6	1	2	0	9
6	1	4	7	6	1	4	9	0	1	4	10	6
7	1	7	4	9	1	7	6	6	1	7	8	3
8	1	10	2	0	1	10	4	0	1	10	6	0
9	2	0	11	3	2	1	1	6	2	1	3	9
10	2	3	8	6	2	3	11	0	2	4	1	6
11	2	6	5	9	2	6	8	6	2	6	11	3

Feet Long.	34 inches broad.				34¼ inches broad.				34½ inches broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	10	0	0	2	10	3	0	2	10	6	0
2	5	8	0	0	5	8	6	0	5	9	0	0
3	8	6	0	0	8	6	9	0	8	7	6	0
4	11	4	0	0	11	5	0	0	11	6	0	0
5	14	2	0	0	14	3	3	0	14	4	6	0
6	17	0	0	0	17	1	6	0	17	3	0	0
7	19	10	0	0	19	11	9	0	20	1	6	0
8	22	8	0	0	22	10	0	0	23	0	0	0
9	25	6	0	0	25	8	3	0	25	10	6	0
10	28	4	0	0	28	6	6	0	28	9	0	0
11	31	2	0	0	31	4	9	0	31	7	6	0
12	34	0	0	0	34	3	0	0	34	6	0	0
13	36	10	0	0	37	1	3	0	37	4	6	0
14	39	8	0	0	39	11	6	0	40	3	0	0
15	42	6	0	0	42	9	9	0	43	1	6	0
16	45	4	0	0	45	8	0	0	46	0	0	0
17	48	2	0	0	48	6	3	0	48	10	6	0
18	51	0	0	0	51	4	6	0	51	9	0	0
19	53	10	0	0	54	2	9	0	54	7	6	0
20	56	8	0	0	57	1	0	0	57	6	0	0
21	59	6	0	0	59	11	3	0	60	4	6	0
22	62	4	0	0	62	9	6	0	63	3	0	0
23	65	2	0	0	65	7	9	0	66	1	6	0
24	68	0	0	0	68	6	0	0	69	0	0	0
25	70	10	0	0	71	4	3	0	71	10	6	0
50	141	8	0	0	142	8	6	0	143	9	0	0
75	212	6	0	0	214	0	9	0	215	7	6	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	8	6	0	0	8	6	0	0	8	7
½	0	1	5	0	0	1	5	1	0	1	5	3
¾	0	2	1	6	0	2	1	8	0	2	1	10
1	0	2	10	0	0	2	10	3	0	2	10	6
2	0	5	8	0	0	5	8	6	0	5	9	0
3	0	8	6	0	0	8	6	9	0	8	7	6
4	0	11	4	0	0	11	5	0	0	11	6	0
5	1	2	2	0	1	2	3	3	1	2	4	6
6	1	5	0	0	1	5	1	6	1	5	3	0
7	1	7	10	0	1	7	11	9	1	8	1	6
8	1	10	8	0	1	10	10	0	1	11	0	0
9	2	1	6	0	2	1	8	3	2	1	10	6
10	2	4	4	0	2	4	6	6	2	4	9	0
11	2	7	2	0	2	7	4	9	2	7	7	6

Feet Long.	34¾ inches broad.				35 inches broad.				35¼ inches broad.			
	Ft.	In	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	10	9	0	2	11	0	0	2	11	3	0
2	5	9	6	0	5	10	0	0	5	10	6	0
3	8	8	3	0	8	9	0	0	8	9	9	0
4	11	7	0	0	11	8	0	0	11	9	0	0
5	14	5	9	0	14	7	0	0	14	8	3	0
6	17	4	6	0	17	6	0	0	17	7	6	0
7	20	3	3	0	20	5	0	0	20	6	9	0
8	23	2	0	0	23	4	0	0	23	6	0	0
9	26	0	9	0	26	3	0	0	26	5	3	0
10	28	11	6	0	29	2	0	0	29	4	6	0
11	31	10	3	0	32	1	0	0	32	3	9	0
12	34	9	0	0	35	0	0	0	35	3	0	0
13	37	7	9	0	37	11	0	0	38	2	3	0
14	40	6	6	0	40	10	0	0	41	1	6	0
15	43	5	3	0	43	9	0	0	44	0	9	0
16	46	4	0	0	46	8	0	0	47	0	0	0
17	49	2	9	0	49	7	0	0	49	11	3	0
18	52	1	6	0	52	6	0	0	52	10	6	0
19	55	0	3	0	55	5	0	0	55	9	9	0
20	57	11	0	0	58	4	0	0	58	9	0	0
21	60	9	9	0	61	3	0	0	61	8	3	0
22	63	8	6	0	64	2	0	0	64	7	6	0
23	66	7	3	0	67	1	0	0	67	6	9	0
24	69	6	0	0	70	0	0	0	70	6	0	0
25	72	4	9	0	72	11	0	0	73	5	3	0
50	144	9	6	0	145	10	0	0	146	10	6	0
75	217	2	3	0	218	9	0	0	220	3	9	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	8	8	0	0	8	9	0	0	8	9
½	0	1	5	4	0	1	5	6	0	1	5	7
¾	0	2	2	0	0	2	2	3	0	2	2	5
1	0	2	10	9	0	2	11	0	0	2	11	3
2	0	5	9	6	0	5	10	0	0	5	10	6
3	0	8	8	3	0	8	9	0	0	8	9	9
4	0	11	7	0	0	11	8	0	0	11	9	0
5	1	2	5	9	1	2	7	0	1	2	8	3
6	1	5	4	6	1	5	6	0	1	5	7	6
7	1	8	3	3	1	8	5	0	1	8	6	9
8	1	11	2	0	1	11	4	0	1	11	6	0
9	2	2	0	9	2	2	3	0	2	2	5	3
10	2	4	11	6	2	5	2	0	2	5	4	6
11	2	7	10	3	2	8	1	0	2	8	3	9

Feet Long.	35½ inches broad.				35¾ inches broad.				3 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	2	11	6	0	2	11	9	0	3	0	0	0
2	5	11	0	0	5	11	6	0	6	0	0	0
3	8	10	6	0	8	11	3	0	9	0	0	0
4	11	10	0	0	11	11	0	0	12	0	0	0
5	14	9	6	0	14	10	9	0	15	0	0	0
6	17	9	0	0	17	10	6	0	18	0	0	0
7	20	8	6	0	20	10	3	0	21	0	0	0
8	23	8	0	0	23	10	0	0	24	0	0	0
9	26	7	6	0	26	9	9	0	27	0	0	0
10	29	7	0	0	29	9	6	0	30	0	0	0
11	32	6	6	0	32	9	3	0	33	0	0	0
12	35	6	0	0	35	9	0	0	36	0	0	0
13	38	5	6	0	38	8	9	0	39	0	0	0
14	41	5	0	0	41	8	6	0	42	0	0	0
15	44	4	6	0	44	8	3	0	45	0	0	0
16	47	4	0	0	47	8	0	0	48	0	0	0
17	50	3	6	0	50	7	9	0	51	0	0	0
18	53	3	0	0	53	7	6	0	54	0	0	0
19	56	2	6	0	56	7	3	0	57	0	0	0
20	59	2	0	0	59	7	0	0	60	0	0	0
21	62	1	6	0	62	6	9	0	63	0	0	0
22	65	1	0	0	65	6	6	0	66	0	0	0
23	68	0	6	0	68	6	3	0	69	0	0	0
24	71	0	0	0	71	6	0	0	72	0	0	0
25	73	11	6	0	74	5	9	0	75	0	0	0
50	147	11	0	0	148	11	6	0	150	0	0	0
75	221	10	6	0	223	5	3	0	225	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	8	10	0	0	8	11	0	0	9	0
½	0	1	5	9	0	1	5	10	0	1	6	0
¾	0	2	2	7	0	2	2	9	0	2	3	0
1	0	2	11	6	0	2	11	9	0	3	0	0
2	0	5	11	0	0	5	11	6	0	6	0	0
3	0	8	10	6	0	8	11	3	0	9	0	0
4	0	11	10	0	0	11	11	0	1	0	0	0
5	1	2	9	6	1	2	10	9	1	3	0	0
6	1	5	9	0	1	5	10	6	1	6	0	0
7	1	8	8	6	1	8	10	3	1	9	0	0
8	1	11	8	0	1	11	10	0	2	0	0	0
9	2	2	7	6	2	2	9	9	2	3	0	0
10	2	5	7	0	2	5	9	6	2	6	0	0
11	2	8	6	6	2	8	9	3	2	9	0	0

Feet Long.	4 feet broad.				5 feet broad.				6 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	4	0	0	0	5	0	0	0	6	0	0	0
2	8	0	0	0	10	0	0	0	12	0	0	0
3	12	0	0	0	15	0	0	0	18	0	0	0
4	16	0	0	0	20	0	0	0	24	0	0	0
5	20	0	0	0	25	0	0	0	30	0	0	0
6	24	0	0	0	30	0	0	0	36	0	0	0
7	28	0	0	0	35	0	0	0	42	0	0	0
8	32	0	0	0	40	0	0	0	48	0	0	0
9	36	0	0	0	45	0	0	0	54	0	0	0
10	40	0	0	0	50	0	0	0	60	0	0	0
11	44	0	0	0	55	0	0	0	66	0	0	0
12	48	0	0	0	60	0	0	0	72	0	0	0
13	52	0	0	0	65	0	0	0	78	0	0	0
14	56	0	0	0	70	0	0	0	84	0	0	0
15	60	0	0	0	75	0	0	0	90	0	0	0
16	64	0	0	0	80	0	0	0	96	0	0	0
17	68	0	0	0	85	0	0	0	102	0	0	0
18	72	0	0	0	90	0	0	0	108	0	0	0
19	76	0	0	0	95	0	0	0	114	0	0	0
20	80	0	0	0	100	0	0	0	120	0	0	0
21	84	0	0	0	105	0	0	0	126	0	0	0
22	88	0	0	0	110	0	0	0	132	0	0	0
23	92	0	0	0	115	0	0	0	138	0	0	0
24	96	0	0	0	120	0	0	0	144	0	0	0
25	100	0	0	0	125	0	0	0	150	0	0	0
50	200	0	0	0	250	0	0	0	300	0	0	0
75	300	0	0	0	375	0	0	0	450	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	1	0	0	0	1	3	0	0	1	6	0
⅓	0	2	0	0	0	2	6	0	0	3	0	0
¾	0	3	0	0	0	3	9	0	0	4	6	0
1	0	4	0	0	0	5	0	0	0	6	0	0
2	0	8	0	0	0	10	0	0	1	0	0	0
3	1	0	0	0	1	3	0	0	1	6	0	0
4	1	4	0	0	1	8	0	0	2	0	0	0
5	1	8	0	0	2	1	0	0	2	6	0	0
6	2	0	0	0	2	6	0	0	3	0	0	0
7	2	4	0	0	2	11	0	0	3	6	0	0
8	2	8	0	0	3	4	0	0	4	0	0	0
9	3	0	0	0	3	9	0	0	4	6	0	0
10	3	4	0	0	4	2	0	0	5	0	0	0
11	3	8	0	0	4	7	0	0	5	6	0	0

Feet Long.	7 feet broad.				8 feet broad.				9 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	7	0	0	0	8	0	0	0	9	0	0	0
2	14	0	0	0	16	0	0	0	18	0	0	0
3	21	0	0	0	24	0	0	0	27	0	0	0
4	28	0	0	0	32	0	0	0	36	0	0	0
5	35	0	0	0	40	0	0	0	45	0	0	0
6	42	0	0	0	48	0	0	0	54	0	0	0
7	49	0	0	0	56	0	0	0	63	0	0	0
8	56	0	0	0	64	0	0	0	72	0	0	0
9	63	0	0	0	72	0	0	0	81	0	0	0
10	70	0	0	0	80	0	0	0	90	0	0	0
11	77	0	0	0	88	0	0	0	99	0	0	0
12	84	0	0	0	96	0	0	0	108	0	0	0
13	91	0	0	0	104	0	0	0	117	0	0	0
14	98	0	0	0	112	0	0	0	126	0	0	0
15	105	0	0	0	120	0	0	0	135	0	0	0
16	112	0	0	0	128	0	0	0	144	0	0	0
17	119	0	0	0	136	0	0	0	153	0	0	0
18	126	0	0	0	144	0	0	0	162	0	0	0
19	133	0	0	0	152	0	0	0	171	0	0	0
20	140	0	0	0	160	0	0	0	180	0	0	0
21	147	0	0	0	168	0	0	0	189	0	0	0
22	154	0	0	0	176	0	0	0	198	0	0	0
23	161	0	0	0	184	0	0	0	207	0	0	0
24	168	0	0	0	192	0	0	0	216	0	0	0
25	175	0	0	0	200	0	0	0	225	0	0	0
50	350	0	0	0	400	0	0	0	450	0	0	0
75	525	0	0	0	600	0	0	0	675	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	1	9	0	0	2	0	0	0	2	3	0
½	0	3	6	0	0	4	0	0	0	4	6	0
¾	0	5	3	0	0	6	0	0	0	6	9	0
1	0	7	0	0	0	8	0	0	0	9	0	0
2	1	2	0	0	1	4	0	0	1	6	0	0
3	1	9	0	0	2	0	0	0	2	3	0	0
4	2	4	0	0	2	8	0	0	3	0	0	0
5	2	11	0	0	3	4	0	0	3	9	0	0
6	3	6	0	0	4	0	0	0	4	6	0	0
7	4	1	0	0	4	8	0	0	5	3	0	0
8	4	8	0	0	5	4	0	0	6	0	0	0
9	5	3	0	0	6	0	0	0	6	9	0	0
10	5	10	0	0	6	8	0	0	7	6	0	0
11	6	5	0	0	7	4	0	0	8	3	0	0

Feet Long.	10 feet broad.				11 feet broad.				12 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	10	0	0	0	11	0	0	0	12	0	0	0
2	20	0	0	0	22	0	0	0	24	0	0	0
3	30	0	0	0	33	0	0	0	36	0	0	0
4	40	0	0	0	44	0	0	0	48	0	0	0
5	50	0	0	0	55	0	0	0	60	0	0	0
6	60	0	0	0	66	0	0	0	72	0	0	0
7	70	0	0	0	77	0	0	0	84	0	0	0
8	80	0	0	0	88	0	0	0	96	0	0	0
9	90	0	0	0	99	0	0	0	108	0	0	0
10	100	0	0	0	110	0	0	0	120	0	0	0
11	110	0	0	0	121	0	0	0	132	0	0	0
12	120	0	0	0	132	0	0	0	144	0	0	0
13	130	0	0	0	143	0	0	0	156	0	0	0
14	140	0	0	0	154	0	0	0	168	0	0	0
15	150	0	0	0	165	0	0	0	180	0	0	0
16	160	0	0	0	176	0	0	0	192	0	0	0
17	170	0	0	0	187	0	0	0	204	0	0	0
18	180	0	0	0	198	0	0	0	216	0	0	0
19	190	0	0	0	209	0	0	0	228	0	0	0
20	200	0	0	0	220	0	0	0	240	0	0	0
21	210	0	0	0	231	0	0	0	252	0	0	0
22	220	0	0	0	242	0	0	0	264	0	0	0
23	230	0	0	0	253	0	0	0	276	0	0	0
24	240	0	0	0	264	0	0	0	288	0	0	0
25	250	0	0	0	275	0	0	0	300	0	0	0
50	500	0	0	0	550	0	0	0	600	0	0	0
75	750	0	0	0	825	0	0	0	900	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	2	6	0	0	2	9	0	0	3	0	0
½	0	5	0	0	0	5	6	0	0	6	0	0
¾	0	7	6	0	0	8	3	0	0	9	0	0
1	0	10	0	0	0	11	0	0	1	0	0	0
2	1	8	0	0	1	10	0	0	2	0	0	0
3	2	6	0	0	2	9	0	0	3	0	0	0
4	3	4	0	0	3	8	0	0	4	0	0	0
5	4	2	0	0	4	7	0	0	5	0	0	0
6	5	0	0	0	5	6	0	0	6	0	0	0
7	5	10	0	0	6	5	0	0	7	0	0	0
8	6	8	0	0	7	4	0	0	8	0	0	0
9	7	6	0	0	8	3	0	0	9	0	0	0
10	8	4	0	0	9	2	0	0	10	0	0	0
11	9	2	0	0	10	1	0	0	11	0	0	0

Feet Long.	13 feet broad.				14 feet broad.				15 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	13	0	0	0	14	0	0	0	15	0	0	0
2	26	0	0	0	28	0	0	0	30	0	0	0
3	39	0	0	0	42	0	0	0	45	0	0	0
4	52	0	0	0	56	0	0	0	60	0	0	0
5	65	0	0	0	70	0	0	0	75	0	0	0
6	78	0	0	0	84	0	0	0	90	0	0	0
7	91	0	0	0	98	0	0	0	105	0	0	0
8	104	0	0	0	112	0	0	0	120	0	0	0
9	117	0	0	0	126	0	0	0	135	0	0	0
10	130	0	0	0	140	0	0	0	150	0	0	0
11	143	0	0	0	154	0	0	0	165	0	0	0
12	156	0	0	0	168	0	0	0	180	0	0	0
13	169	0	0	0	182	0	0	0	195	0	0	0
14	182	0	0	0	196	0	0	0	210	0	0	0
15	195	0	0	0	210	0	0	0	225	0	0	0
16	208	0	0	0	224	0	0	0	240	0	0	0
17	221	0	0	0	238	0	0	0	255	0	0	0
18	234	0	0	0	252	0	0	0	270	0	0	0
19	247	0	0	0	266	0	0	0	285	0	0	0
20	260	0	0	0	280	0	0	0	300	0	0	0
21	273	0	0	0	294	0	0	0	315	0	0	0
22	286	0	0	0	308	0	0	0	330	0	0	0
23	299	0	0	0	322	0	0	0	345	0	0	0
24	312	0	0	0	336	0	0	0	360	0	0	0
25	325	0	0	0	350	0	0	0	375	0	0	0
50	650	0	0	0	700	0	0	0	750	0	0	0
75	975	0	0	0	1050	0	0	0	1125	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	3	3	0	0	3	6	0	0	3	9	0
½	0	6	6	0	0	7	0	0	0	7	6	0
¾	0	9	9	0	0	10	6	0	0	11	3	0
1	1	1	0	0	1	2	0	0	1	3	0	0
2	2	2	0	0	2	4	0	0	2	6	0	0
3	3	3	0	0	3	6	0	0	3	9	0	0
4	4	4	0	0	4	8	0	0	5	0	0	0
5	5	5	0	0	5	10	0	0	6	3	0	0
6	6	6	0	0	7	0	0	0	7	6	0	0
7	7	7	0	0	8	2	0	0	8	9	0	0
8	8	8	0	0	9	4	0	0	10	0	0	0
9	9	9	0	0	10	6	0	0	11	3	0	0
10	10	10	0	0	11	8	0	0	12	6	0	0
11	11	11	0	0	12	10	0	0	13	9	0	0

Feet Long.	16 feet broad.				17 feet broad.				18 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	16	0	0	0	17	0	0	0	18	0	0	0
2	32	0	0	0	34	0	0	0	36	0	0	0
3	48	0	0	0	51	0	0	0	54	0	0	0
4	64	0	0	0	68	0	0	0	72	0	0	0
5	80	0	0	0	85	0	0	0	90	0	0	0
6	96	0	0	0	102	0	0	0	108	0	0	0
7	112	0	0	0	119	0	0	0	126	0	0	0
8	128	0	0	0	136	0	0	0	144	0	0	0
9	144	0	0	0	153	0	0	0	162	0	0	0
10	160	0	0	0	170	0	0	0	180	0	0	0
11	176	0	0	0	187	0	0	0	198	0	0	0
12	192	0	0	0	204	0	0	0	216	0	0	0
13	208	0	0	0	221	0	0	0	234	0	0	0
14	224	0	0	0	238	0	0	0	252	0	0	0
15	240	0	0	0	255	0	0	0	270	0	0	0
16	256	0	0	0	272	0	0	0	288	0	0	0
17	272	0	0	0	289	0	0	0	306	0	0	0
18	288	0	0	0	306	0	0	0	324	0	0	0
19	304	0	0	0	323	0	0	0	342	0	0	0
20	320	0	0	0	340	0	0	0	360	0	0	0
21	336	0	0	0	357	0	0	0	378	0	0	0
22	352	0	0	0	374	0	0	0	396	0	0	0
23	368	0	0	0	391	0	0	0	414	0	0	0
24	384	0	0	0	408	0	0	0	432	0	0	0
25	400	0	0	0	425	0	0	0	450	0	0	0
50	800	0	0	0	850	0	0	0	900	0	0	0
75	1200	0	0	0	1275	0	0	0	1350	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	4	0	0	0	4	3	0	0	4	6	0
½	0	8	0	0	0	8	6	0	0	9	0	0
¾	1	0	0	0	1	0	9	0	1	1	6	0
1	1	4	0	0	1	5	0	0	1	6	0	0
2	2	8	0	0	2	10	0	0	3	0	0	0
3	4	0	0	0	4	3	0	0	4	6	0	0
4	5	4	0	0	5	8	0	0	6	0	0	0
5	6	8	0	0	7	1	0	0	7	6	0	0
6	8	0	0	0	8	6	0	0	9	0	0	0
7	9	4	0	0	9	11	0	0	10	6	0	0
8	10	8	0	0	11	4	0	0	12	0	0	0
9	12	0	0	0	12	9	0	0	13	6	0	0
10	13	4	0	0	14	2	0	0	15	0	0	0
11	14	8	0	0	15	7	0	0	16	6	0	0

Feet Long.	19 feet broad.				20 feet broad.				21 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	19	0	0	0	20	0	0	0	21	0	0	0
2	38	0	0	0	40	0	0	0	42	0	0	0
3	57	0	0	0	60	0	0	0	63	0	0	0
4	76	0	0	0	80	0	0	0	84	0	0	0
5	95	0	0	0	100	0	0	0	105	0	0	0
6	114	0	0	0	120	0	0	0	126	0	0	0
7	133	0	0	0	140	0	0	0	147	0	0	0
8	152	0	0	0	160	0	0	0	168	0	0	0
9	171	0	0	0	180	0	0	0	189	0	0	0
10	190	0	0	0	200	0	0	0	210	0	0	0
11	209	0	0	0	220	0	0	0	231	0	0	0
12	228	0	0	0	240	0	0	0	252	0	0	0
13	247	0	0	0	260	0	0	0	273	0	0	0
14	266	0	0	0	280	0	0	0	294	0	0	0
15	285	0	0	0	300	0	0	0	315	0	0	0
16	304	0	0	0	320	0	0	0	336	0	0	0
17	323	0	0	0	340	0	0	0	357	0	0	0
18	342	0	0	0	360	0	0	0	378	0	0	0
19	361	0	0	0	380	0	0	0	399	0	0	0
20	380	0	0	0	400	0	0	0	420	0	0	0
21	399	0	0	0	420	0	0	0	441	0	0	0
22	418	0	0	0	440	0	0	0	462	0	0	0
23	437	0	0	0	460	0	0	0	483	0	0	0
24	456	0	0	0	480	0	0	0	504	0	0	0
25	475	0	0	0	500	0	0	0	525	0	0	0
50	950	0	0	0	1000	0	0	0	1050	0	0	0
75	1425	0	0	0	1500	0	0	0	1575	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	4	9	0	0	5	0	0	0	5	3	0
½	0	9	6	0	0	10	0	0	0	10	6	0
¾	1	2	3	0	1	3	0	0	1	3	9	0
1	1	7	0	0	1	8	0	0	1	9	0	0
2	3	2	0	0	3	4	0	0	3	6	0	0
3	4	9	0	0	5	0	0	0	5	3	0	0
4	6	4	0	0	6	8	0	0	7	0	0	0
5	7	11	0	0	8	4	0	0	8	9	0	0
6	9	6	0	0	10	0	0	0	10	6	0	0
7	11	1	0	0	11	8	0	0	12	3	0	0
8	12	8	0	0	13	4	0	0	14	0	0	0
9	14	3	0	0	15	0	0	0	15	9	0	0
10	15	10	0	0	16	8	0	0	17	6	0	0
11	17	5	0	0	18	4	0	0	19	3	0	0

Feet Long.	22 feet broad.				23 feet broad.				24 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	22	0	0	0	23	0	0	0	24	0	0	0
2	44	0	0	0	46	0	0	0	48	0	0	0
3	66	0	0	0	69	0	0	0	72	0	0	0
4	88	0	0	0	92	0	0	0	96	0	0	0
5	110	0	0	0	115	0	0	0	120	0	0	0
6	132	0	0	0	138	0	0	0	144	0	0	0
7	154	0	0	0	161	0	0	0	168	0	0	0
8	176	0	0	0	184	0	0	0	192	0	0	0
9	198	0	0	0	207	0	0	0	216	0	0	0
10	220	0	0	0	230	0	0	0	240	0	0	0
11	242	0	0	0	253	0	0	0	264	0	0	0
12	264	0	0	0	276	0	0	0	288	0	0	0
13	286	0	0	0	299	0	0	0	312	0	0	0
14	308	0	0	0	322	0	0	0	336	0	0	0
15	330	0	0	0	345	0	0	0	360	0	0	0
16	352	0	0	0	368	0	0	0	384	0	0	0
17	374	0	0	0	391	0	0	0	408	0	0	0
18	396	0	0	0	414	0	0	0	432	0	0	0
19	418	0	0	0	437	0	0	0	456	0	0	0
20	440	0	0	0	460	0	0	0	480	0	0	0
21	462	0	0	0	483	0	0	0	504	0	0	0
22	484	0	0	0	506	0	0	0	528	0	0	0
23	506	0	0	0	529	0	0	0	552	0	0	0
24	528	0	0	0	552	0	0	0	576	0	0	0
25	550	0	0	0	575	0	0	0	600	0	0	0
50	1100	0	0	0	1150	0	0	0	1200	0	0	0
75	1650	0	0	0	1725	0	0	0	1800	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	5	6	0	0	5	9	0	0	6	0	0
½	0	11	0	0	0	11	6	0	1	0	0	0
¾	1	4	6	0	1	5	3	0	1	6	0	0
1	1	10	0	0	1	11	0	0	2	0	0	0
2	3	8	0	0	3	10	0	0	4	0	0	0
3	5	6	0	0	5	9	0	0	6	0	0	0
4	7	4	0	0	7	8	0	0	8	0	0	0
5	9	2	0	0	9	7	0	0	10	0	0	0
6	11	0	0	0	11	6	0	0	12	0	0	0
7	12	10	0	0	13	5	0	0	14	0	0	0
8	14	8	0	0	15	4	0	0	16	0	0	0
9	16	6	0	0	17	3	0	0	18	0	0	0
10	18	4	0	0	19	2	0	0	20	0	0	0
11	20	2	0	0	21	1	0	0	22	0	0	0

Feet Long.	27 feet broad.				30 feet broad.				33 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	27	0	0	0	30	0	0	0	33	0	0	0
2	54	0	0	0	60	0	0	0	66	0	0	0
3	81	0	0	0	90	0	0	0	99	0	0	0
4	108	0	0	0	120	0	0	0	132	0	0	0
5	135	0	0	0	150	0	0	0	165	0	0	0
6	162	0	0	0	180	0	0	0	198	0	0	0
7	189	0	0	0	210	0	0	0	231	0	0	0
8	216	0	0	0	240	0	0	0	264	0	0	0
9	243	0	0	0	270	0	0	0	297	0	0	0
10	270	0	0	0	300	0	0	0	330	0	0	0
11	297	0	0	0	330	0	0	0	363	0	0	0
12	324	0	0	0	360	0	0	0	396	0	0	0
13	351	0	0	0	390	0	0	0	429	0	0	0
14	378	0	0	0	420	0	0	0	462	0	0	0
15	405	0	0	0	450	0	0	0	495	0	0	0
16	432	0	0	0	480	0	0	0	528	0	0	0
17	459	0	0	0	510	0	0	0	561	0	0	0
18	486	0	0	0	540	0	0	0	594	0	0	0
19	513	0	0	0	570	0	0	0	627	0	0	0
20	540	0	0	0	600	0	0	0	660	0	0	0
21	567	0	0	0	630	0	0	0	693	0	0	0
22	594	0	0	0	660	0	0	0	726	0	0	0
23	621	0	0	0	690	0	0	0	759	0	0	0
24	648	0	0	0	720	0	0	0	792	0	0	0
25	675	0	0	0	750	0	0	0	825	0	0	0
50	1350	0	0	0	1500	0	0	0	1650	0	0	0
75	2025	0	0	0	2250	0	0	0	2475	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	6	9	0	0	7	6	0	0	8	3	0
½	1	1	6	0	1	3	0	0	1	4	6	0
¾	1	8	3	0	1	10	6	0	2	0	9	0
1	2	3	0	0	2	6	0	0	2	9	0	0
2	4	6	0	0	5	0	0	0	5	6	0	0
3	6	9	0	0	7	6	0	0	8	3	0	0
4	9	0	0	0	10	0	0	0	11	0	0	0
5	11	3	0	0	12	6	0	0	13	9	0	0
6	13	6	0	0	15	0	0	0	16	6	0	0
7	15	9	0	0	17	6	0	0	19	3	0	0
8	18	0	0	0	20	0	0	0	22	0	0	0
9	20	3	0	0	22	6	0	0	24	9	0	0
10	22	6	0	0	25	0	0	0	27	6	0	0
11	24	9	0	0	27	6	0	0	30	3	0	0

Feet Long.	36 feet broad.				39 feet broad.				42 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	36	0	0	0	39	0	0	0	42	0	0	0
2	72	0	0	0	78	0	0	0	84	0	0	0
3	108	0	0	0	117	0	0	0	126	0	0	0
4	144	0	0	0	156	0	0	0	168	0	0	0
5	180	0	0	0	195	0	0	0	210	0	0	0
6	216	0	0	0	234	0	0	0	252	0	0	0
7	252	0	0	0	273	0	0	0	294	0	0	0
8	288	0	0	0	312	0	0	0	336	0	0	0
9	324	0	0	0	351	0	0	0	378	0	0	0
10	360	0	0	0	390	0	0	0	420	0	0	0
11	396	0	0	0	429	0	0	0	462	0	0	0
12	432	0	0	0	468	0	0	0	504	0	0	0
13	468	0	0	0	507	0	0	0	546	0	0	0
14	504	0	0	0	546	0	0	0	588	0	0	0
15	540	0	0	0	585	0	0	0	630	0	0	0
16	576	0	0	0	624	0	0	0	672	0	0	0
17	612	0	0	0	663	0	0	0	714	0	0	0
18	648	0	0	0	702	0	0	0	756	0	0	0
19	684	0	0	0	741	0	0	0	798	0	0	0
20	720	0	0	0	780	0	0	0	840	0	0	0
21	756	0	0	0	819	0	0	0	882	0	0	0
22	792	0	0	0	858	0	0	0	924	0	0	0
23	828	0	0	0	897	0	0	0	966	0	0	0
24	864	0	0	0	936	0	0	0	1008	0	0	0
25	900	0	0	0	975	0	0	0	1050	0	0	0
50	1800	0	0	0	1950	0	0	0	2100	0	0	0
75	2700	0	0	0	2925	0	0	0	3150	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	9	0	0	0	9	9	0	0	10	6	0
½	1	6	0	0	1	7	6	0	1	9	0	0
¾	2	3	0	0	2	5	3	0	2	7	6	0
1	3	0	0	0	3	3	0	0	3	6	0	0
2	6	0	0	0	6	6	0	0	7	0	0	0
3	9	0	0	0	9	9	0	0	10	6	0	0
4	12	0	0	0	13	0	0	0	14	0	0	0
5	15	0	0	0	16	3	0	0	17	6	0	0
6	18	0	0	0	19	6	0	0	21	0	0	0
7	21	0	0	0	22	9	0	0	24	6	0	0
8	24	0	0	0	26	0	0	0	28	0	0	0
9	27	0	0	0	29	3	0	0	31	6	0	0
10	30	0	0	0	32	6	0	0	35	0	0	0
11	33	0	0	0	35	9	0	0	38	6	0	0

Feet Long	45 feet broad.				48 feet broad.				51 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	45	0	0	0	48	0	0	0	51	0	0	0
2	90	0	0	0	96	0	0	0	102	0	0	0
3	135	0	0	0	144	0	0	0	153	0	0	0
4	180	0	0	0	192	0	0	0	204	0	0	0
5	225	0	0	0	240	0	0	0	255	0	0	0
6	270	0	0	0	288	0	0	0	306	0	0	0
7	315	0	0	0	336	0	0	0	357	0	0	0
8	360	0	0	0	384	0	0	0	408	0	0	0
9	405	0	0	0	432	0	0	0	459	0	0	0
10	450	0	0	0	480	0	0	0	510	0	0	0
11	495	0	0	0	528	0	0	0	561	0	0	0
12	540	0	0	0	576	0	0	0	612	0	0	0
13	585	0	0	0	624	0	0	0	663	0	0	0
14	630	0	0	0	672	0	0	0	714	0	0	0
15	675	0	0	0	720	0	0	0	765	0	0	0
16	720	0	0	0	768	0	0	0	816	0	0	0
17	765	0	0	0	816	0	0	0	867	0	0	0
18	810	0	0	0	864	0	0	0	918	0	0	0
19	855	0	0	0	912	0	0	0	969	0	0	0
20	900	0	0	0	960	0	0	0	1020	0	0	0
21	945	0	0	0	1008	0	0	0	1071	0	0	0
22	990	0	0	0	1056	0	0	0	1122	0	0	0
23	1035	0	0	0	1104	0	0	0	1173	0	0	0
24	1080	0	0	0	1152	0	0	0	1224	0	0	0
25	1125	0	0	0	1200	0	0	0	1275	0	0	0
50	2250	0	0	0	2400	0	0	0	2550	0	0	0
75	3375	0	0	0	3600	0	0	0	3825	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	11	3	0	1	0	0	0	1	0	9	0
½	1	10	6	0	2	0	0	0	2	1	6	0
¾	2	9	9	0	3	0	0	0	3	2	3	0
1	3	9	0	0	4	0	0	0	4	3	0	0
2	7	6	0	0	8	0	0	0	8	6	0	0
3	11	3	0	0	12	0	0	0	12	9	0	0
4	15	0	0	0	16	0	0	0	17	0	0	0
5	18	9	0	0	20	0	0	0	21	3	0	0
6	22	6	0	0	24	0	0	0	25	6	0	0
7	26	3	0	0	28	0	0	0	29	9	0	0
8	30	0	0	0	32	0	0	0	34	0	0	0
9	33	9	0	0	36	0	0	0	38	3	0	0
10	37	6	0	0	40	0	0	0	42	6	0	0
11	41	3	0	0	44	0	0	0	46	9	0	0

Feet Long.	54 feet broad.				57 feet broad.				60 feet broad.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
1	54	0	0	0	57	0	0	0	60	0	0	0
2	108	0	0	0	114	0	0	0	120	0	0	0
3	162	0	0	0	171	0	0	0	180	0	0	0
4	216	0	0	0	228	0	0	0	240	0	0	0
5	270	0	0	0	285	0	0	0	300	0	0	0
6	324	0	0	0	342	0	0	0	360	0	0	0
7	378	0	0	0	399	0	0	0	420	0	0	0
8	432	0	0	0	456	0	0	0	480	0	0	0
9	486	0	0	0	513	0	0	0	540	0	0	0
10	540	0	0	0	570	0	0	0	600	0	0	0
11	594	0	0	0	627	0	0	0	660	0	0	0
12	648	0	0	0	684	0	0	0	720	0	0	0
13	702	0	0	0	741	0	0	0	780	0	0	0
14	756	0	0	0	798	0	0	0	840	0	0	0
15	810	0	0	0	855	0	0	0	900	0	0	0
16	864	0	0	0	912	0	0	0	960	0	0	0
17	918	0	0	0	969	0	0	0	1020	0	0	0
18	972	0	0	0	1026	0	0	0	1080	0	0	0
19	1026	0	0	0	1083	0	0	0	1140	0	0	0
20	1080	0	0	0	1140	0	0	0	1200	0	0	0
21	1134	0	0	0	1197	0	0	0	1260	0	0	0
22	1188	0	0	0	1254	0	0	0	1320	0	0	0
23	1242	0	0	0	1311	0	0	0	1380	0	0	0
24	1296	0	0	0	1368	0	0	0	1440	0	0	0
25	1350	0	0	0	1425	0	0	0	1500	0	0	0
50	2700	0	0	0	2850	0	0	0	3000	0	0	0
75	4050	0	0	0	4275	0	0	0	4500	0	0	0

Inches Long.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	1	6	0	1	2	3	0	1	3	0	0
½	2	3	0	0	2	4	6	0	2	6	0	0
¾	3	4	6	0	3	6	9	0	3	9	0	0
1	4	6	0	0	4	9	0	0	5	0	0	0
2	9	0	0	0	9	6	0	0	10	0	0	0
3	13	6	0	0	14	3	0	0	15	0	0	0
4	18	0	0	0	19	0	0	0	20	0	0	0
5	22	6	0	0	23	9	0	0	25	0	0	0
6	27	0	0	0	28	6	0	0	30	0	0	0
7	31	6	0	0	33	3	0	0	35	0	0	0
8	36	0	0	0	38	0	0	0	40	0	0	0
9	40	6	0	0	42	9	0	0	45	0	0	0
10	45	0	0	0	47	6	0	0	50	0	0	0
11	49	6	0	0	52	3	0	0	55	0	0	0

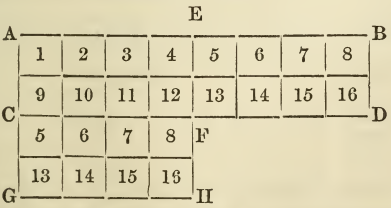
TABLE II.

TO FIND THE SIDE OF A SQUARE EQUIVALENT TO ANY UNEQUAL SIDED FIGURE.

In order to find the solid content of a log, stone, &c., it is necessary, as is shown in the treatise on mensuration, to multiply the breadth by the depth, and that product by the length; or, in other words, to find the area of the end, which being multiplied by the length, gives the solid content. Were tables constructed to suit all possible areas exactly, they would extend beyond the limits generally prescribed to books of this kind. To obviate this, a plan has been adopted for shortening the tables, without sensibly impairing their accuracy. This is done by constructing a table, rising by quarters of an inch, of the sides of squares, whose areas are equivalent to the areas of figures of all dimensions, from ½ inch to 60 inches in breadth or depth; these sides of squares being the *true quarter girt* of such unequal sided figures. The side of the square thus obtained is to be sought for on the top of the columns of the table of solid measure, under which, and opposite the given length of any solid, is found the solid content.

In order to find the square equivalent to any unequal sided piece of stone, &c., the rule is: multiply the breadth by the depth, and extract the square root of the product, which root is the side of a square equal in area to the end of the stone, &c. required.

The following diagram will show the correctness of the principle on which the table is constructed.



Let A B C D represent the end of a stone whose breadth

is 8 feet and depth 2 feet. It is very evident that it is divided by the intersecting lines into spaces each a foot square, and that the portion E B F D contains exactly the same number of these squares as A E C F. If a portion equal to E B F D is now added to the side C F, A E G H will be a square equivalent to A B C D, and will have the side of the square equal to 4 feet.

EXAMPLES.

1. Required the side of a square equal in area to the end of a stone whose breadth is 8 feet, and depth 2 feet?

breadth 8
depth 2

16 (4 feet side of the square.
16

2. Required the sides of squares equal in area to the dimensions $11\frac{1}{2}$ by $5\frac{1}{2}$ inches, and 12 by $5\frac{1}{2}$ inches.

11.5
5.5

575
575

63.25(7.95 side of square.
49

149)1425
9)1341

1585)8400
7925

475

5.5
12

66.0(8.124 side of square.
64

161)200
1)161

1622)3900
2)3244

16244)65600
64976

624

In looking to the table it will be found that the sides of the squares for both of these dimensions, are set down as

8 inches, for this reason, that 7.95 is nearer 8 than $7\frac{3}{4}$ inches; also, that 8.124 is nearer 8 than $8\frac{1}{4}$ inches, and on this principle have the other dimensions in the table been regulated.

If the piece to be measured be a prism, one of the regular bodies, or of an irregular figure, the area of its end must be found as directed in the treatise on mensuration, and its square root extracted, which gives the side of an equivalent square; under which, in the table of solid measure, and opposite the given length, is found the solid content.

The quarter girt of round timber, after deducting from 2 to 4 inches as allowance for the bark, is usually taken as the side of the square. See remarks and examples, pages 23, 24, and 25.

EXPLANATION OF THE TABLE.

Each division of the table has one of the dimensions or depth of the unequal sided piece of timber, &c., placed on the top of it, the first commencing with $\frac{1}{2}$ inch, the succeeding ones rising by $\frac{1}{2}$ inches to $59\frac{1}{2}$ inches. The column on the left hand contains the other dimension or breadth, in inches and $\frac{1}{2}$ inches, which is extended to 60 inches, being as far as is usually required in practice. The double column on the right hand, shows the side of a square in inches and quarters of an inch, equivalent to the area of the dimension, at the top of the division by the dimension opposite which it stands.

Note 1. If there are quarter inches in the given depth and breadth, take the quarter inch from the one, and add it to the other, and proceed to find the side of an equivalent square as already directed.

2. If one of the given dimensions exceeds the bounds of the table, take its half and find the side of a square equivalent to it and the other dimension. The side of the square thus found, if taken by the length in the table of solid measure, will give only half the solid content, and must

therefore be doubled,—or twice the length may be taken, which would give the true content.

3. If both the dimensions exceed the table, take half of each, and proceed to find the side of an equivalent square, which, if taken by the given length, the result will be only one-fourth of the true content, and must therefore be multiplied by 4; or 4 times the length may be used with the side of the square found as above; or the side of the square may be doubled and used with the given length, either of which will give the true content.

4. When dimensions extending beyond this table cannot be readily obtained by the above or similar methods, the side of the square must be found as directed in the Rule, by multiplying the breadth by the depth, and extracting the square root of the product; this taken by the given length in the table of solid measure, will give the content.

EXAMPLES.

1. Required the side of a square equivalent to the dimensions of a piece of timber, which is 22 inches thick, and 43 inches broad?

Find 22 inches on the top of a division, under which and opposite 43 in the left hand column, stands 30.3 or $30\frac{3}{4}$ inches in the right hand columns, the side of the square required.

2. Required the side of a square equivalent to the dimensions of a block of stone, which is $37\frac{1}{2}$ inches by $57\frac{1}{2}$ inches?

Find $37\frac{1}{2}$ inches on the top of a division, under which and opposite $57\frac{1}{2}$ is 46.2, or $46\frac{1}{2}$ inches, the side of an equivalent square.

3. Required the side of a square equivalent to the dimensions $13\frac{3}{4}$ inches by $18\frac{1}{2}$ inches?

Take $\frac{1}{4}$ inch from $13\frac{3}{4}$, and add it to $18\frac{1}{2}$, which will give $13\frac{1}{2}$ by $18\frac{1}{2}$. Find $13\frac{1}{2}$ on the top of a division, under which, and opposite $18\frac{1}{2}$ stands 15.3, or $15\frac{3}{4}$ inches, the side of the square required.

4. Let it be required to find the solid content of a log 58 inches thick, 86 inches broad, and 15 feet long?

As 86 inches is beyond the dimensions in the table, take the half of it, which is 43, which find on the top of a division, and under it opposite 58 inches stands 50.0, or 50 inches, the side of the square. Find now 50 inches on the top of the columns on the table of solid measure, under which and opposite 15 feet the length, stands 260 feet 5 inches, which must be doubled, giving 520 feet 10 inches the content of the log. With the side of the square found as above, twice the length, or 30 feet, may be taken, which gives the same result.

5. Required the content of a solid 20 feet long, 76 inches deep, and 93 inches broad?

As both of these dimensions go beyond the table, take half of each, or 38 by $46\frac{1}{2}$, and under 38 on the top of a division, and opposite $46\frac{1}{2}$, stands 42 inches, the side of the square. Under 42 inches in the table of solid measure, and opposite 20 feet the length, stands 245 feet, which taken 4 times gives 980 feet, the content of the solid. Or 4 times the length might have been taken, which would give the same result. Or the side of the square might be doubled, and under 84 inches, or 7 feet, stands 36 yards 8 feet, equal to 980 feet as before.

6. Required the side of the square of a piece of digging, which is 32 feet wide at the top, 22 feet wide at the bottom, and 12 feet deep.

$32 + 22 = 54 \div 2 = 27$ mean width;
and $27 \times 12 = 324$ = area of end;
then $324(18$ = side of the square.
1

28)224
224

or 18 feet the side of the square.

½ Inch by	
In.	In. 4ths.
1	0 3
1½	0 3
2	1 0
2½	1 0
3	1 1
3½	1 1
4	1 2
4½	1 2
5	1 2
5½	1 3
6	1 3
6½	1 3
7	1 3
7½	2 0
8	2 0
8½	2 0
9	2 0
9½	2 1
10	2 1
10½	2 1
11	2 1
11½	2 2
12	2 2
12½	2 2
13	2 2
13½	2 2
14	2 3
14½	2 3
15	2 3
15½	2 3
16	2 3
16½	2 3
17	3 0
17½	3 0
18	3 0
18½	3 0
19	3 0
19½	3 0
20	3 1

1 Inch by	
In.	In. 4ths.
1½	1 1
2	1 2
2½	1 2
3	1 2
3½	1 3
4	2 0
4½	2 0
5	2 1
5½	2 1
6	2 2
6½	2 2
7	2 3
7½	2 3
8	2 3
8½	3 0
9	3 0
9½	3 0
10	3 1
10½	3 1
11	3 1
11½	3 2
12	3 2
12½	3 2
13	3 2
13½	3 3
14	3 3
14½	3 3
15	3 3
15½	4 0
16	4 0
16½	4 0
17	4 0
17½	4 1
18	4 1
18½	4 1
19	4 1
19½	4 2
20	4 2

1½ Inch by	
In.	In. 4ths.
2	1 3
2½	2 0
3	2 0
3½	2 1
4	2 2
4½	2 2
5	2 3
5½	2 3
6	3 0
6½	3 0
7	3 1
7½	3 1
8	3 2
8½	3 2
9	3 3
9½	3 3
10	3 3
10½	4 0
11	4 0
11½	4 1
12	4 1
12½	4 1
13	4 2
13½	4 2
14	4 2
14½	4 3
15	4 3
15½	4 3
16	5 0
16½	5 0
17	5 0
17½	5 0
18	5 1
18½	5 1
19	5 1
19½	5 2
20	5 2

2 Inches by	
In.	In. 4ths.
2½	2 1
3	2 2
3½	2 3
4	2 3
4½	3 0
5	3 1
5½	3 1
6	3 2
6½	3 2
7	3 3
7½	3 3
8	4 0
8½	4 0
9	4 1
9½	4 1
10	4 2
10½	4 2
11	4 3
11½	4 3
12	5 0
12½	5 0
13	5 0
13½	5 1
14	5 1
14½	5 2
15	5 2
15½	5 2
16	5 3
16½	5 3
17	5 3
17½	6 0
18	6 0
18½	6 0
19	6 1
19½	6 1
20	6 1

2½ Inches by	
In.	In. 4ths.
3	2 3
3½	3 0
4	3 1
4½	3 1
5	3 2
5½	3 3
6	3 3
6½	4 0
7	4 1
7½	4 1
8	4 2
8½	4 2
9	4 3
9½	4 3
10	5 0
10½	5 0
11	5 1
11½	5 1
12	5 2
12½	5 2
13	5 3

In.	In.	4ths.
13½	5	3
14	6	0
14½	6	0
15	6	0
15½	6	1
16	6	1
16½	6	2
17	6	2
17½	6	2
18	6	3
18½	6	3
19	7	0
19½	7	0
20	7	0

3 Inches by

In.	In.	4ths.
3½	3	1
4	3	2
4½	3	3
5	3	3
5½	4	0
6	4	1
6½	4	1
7	4	2
7½	4	3
8	4	3
8½	5	0
9	5	1
9½	5	1
10	5	2
10½	5	2
11	5	3
11½	5	3
12	6	0
12½	6	0
13	6	1
13½	6	1
14	6	2
14½	6	2
15	6	3
15½	6	3
16	7	0
16½	7	0
17	7	1

In.	In.	4ths.
17½	7	1
18	7	1
18½	7	2
19	7	2
19½	7	3
20	7	3

3½ Inches by

In.	In.	4ths.
4	3	3
4½	3	3
5	4	0
5½	4	1
6	4	2
6½	4	3
7	5	0
7½	5	0
8	5	1
8½	5	2
9	5	2
9½	5	3
10	6	0
10½	6	0
11	6	1
11½	6	1
12	6	2
12½	6	2
13	6	3
13½	7	0
14	7	0
14½	7	0
15	7	1
15½	7	1
16	7	2
16½	7	2
17	7	3
17½	7	3
18	8	0
18½	8	0
19	8	0
19½	8	1
20	8	1

4 Inches by

In.	In.	4ths.
4½	4	1
5	4	2
5½	4	3
6	5	0
6½	5	0
7	5	1
7½	5	2
8	5	2
8½	5	3
9	6	0
9½	6	1
10	6	1
10½	6	2
11	6	2
11½	6	3
12	7	0
12½	7	0
13	7	1
13½	7	1
14	7	2
14½	7	2
15	7	3
15½	7	3
16	8	0
16½	8	1
17	8	1
17½	8	1
18	8	2
18½	8	2
19	8	3
19½	8	3
20	9	0

4½ Inches by

In.	In.	4ths.
5	4	3
5½	5	0
6	5	1
6½	5	2
7	5	2
7½	5	3
8	6	0
8½	6	1

In.	In.	4ths.
9	6	1
9½	6	2
10	6	3
10½	6	3
11	7	0
11½	7	1
12	7	1
12½	7	2
13	7	3
13½	7	3
14	8	0
14½	8	0
15	8	1
15½	8	1
16	8	2
16½	8	2
17	8	3
17½	8	3
18	9	0
18½	9	0
19	9	1
19½	9	1
20	9	2

5 Inches by

In.	In.	4ths.
5½	5	1
6	5	2
6½	5	3
7	6	0
7½	6	0
8	6	1
8½	6	2
9	6	3
9½	6	3
10	7	0
10½	7	1
11	7	2
11½	7	2
12	7	3
12½	8	0
13	8	0
13½	8	1
14	8	1
14½	8	2

In.	In.	4ths.
15	8	3
15½	8	3
16	9	0
16½	9	0
17	9	1
17½	9	1
18	9	2
18½	9	2
19	9	3
19½	9	3
20	10	0

5½ Inches by

In.	In.	4ths.
6	5	3
6½	6	0
7	6	1
7½	6	2
8	6	3
8½	6	3
9	7	0
9½	7	1
10	7	2
10½	7	2
11	7	3
11½	8	0
12	8	0
12½	8	1
13	8	2
13½	8	2
14	8	3
14½	9	0
15	9	0
15½	9	1
16	9	2
16½	9	2
17	9	3
17½	9	3
18	10	0
18½	10	0
19	10	1
19½	10	1
20	10	2

6 Inches by

In.	In.	4ths.
6½	6	1
7	6	2
7½	6	3
8	7	0
8½	7	1
9	7	1
9½	7	2
10	7	3
10½	8	0
11	8	0
11½	8	1
12	8	2
12½	8	3
13	8	3
13½	9	0
14	9	1
14½	9	1
15	9	2
15½	9	3
16	9	3
16½	10	0
17	10	0
17½	10	1
18	10	2
18½	10	2
19	10	3
19½	10	3
20	11	0

6½ Inches by

In.	In.	4ths.
7	6	3
7½	7	0
8	7	1
8½	7	2
9	7	3
9½	7	3
10	8	0
10½	8	1
11	8	2
11½	8	3
12	8	3
12½	9	0

In.	In.	4ths.
13	9	1
13½	9	1
14	9	2
14½	9	3
15	9	3
15½	10	0
16	10	1
16½	10	1
17	10	2
17½	10	3
18	10	3
18½	11	0
19	11	0
19½	11	1
20	11	1

7 Inches by

In.	In.	4ths.
7½	7	1
8	7	2
8½	7	3
9	8	0
9½	8	1
10	8	1
10½	8	2
11	8	3
11½	9	0
12	9	1
12½	9	1
13	9	2
13½	9	3
14	10	0
14½	10	0
15	10	1
15½	10	2
16	10	2
16½	10	3
17	11	0
17½	11	0
18	11	1
18½	11	1
19	11	2
19½	11	2
20	11	3

7½ Inches by

In.	In.	4ths.
8	7	3
8½	8	0
9	8	1
9½	8	2
10	8	3
10½	8	3
11	9	0
11½	9	1
12	9	2
12½	9	3
13	9	3
13½	10	0
14	10	1
14½	10	2
15	10	2
15½	10	3
16	11	0
16½	11	0
17	11	1
17½	11	2
18	11	2
18½	11	3
19	11	3
19½	12	0
20	12	1

8 Inches by

In.	In.	4ths.
8½	8	1
9	8	2
9½	8	3
10	9	0
10½	9	1
11	9	2
11½	9	2
12	9	3
12½	10	0
13	10	1
13½	10	2
14	10	2
14½	10	3
15	11	0
15½	11	1

In.	In. 4ths.
16	11 1
16½	11 2
17	11 2
17½	11 3
18	12 0
18½	12 0
19	12 1
19½	12 1
20	12 2

8⅓ Inches by

In.	In. 4ths.
9	8 3
9½	9 0
10	9 1
10½	9 2
11	9 3
11½	10 0
12	10 0
12½	10 1
13	10 2
13½	10 3
14	11 0
14½	11 0
15	11 1
15½	11 2
16	11 3
16½	11 3
17	12 0
17½	12 1
18	12 1
18½	12 2
19	12 2
19½	12 3
20	13 0

9 Inches by

In.	In. 4ths.
9½	9 1
10	9 2
10½	9 3
11	10 0
11½	10 1
12	10 2
12½	10 2
13	10 3
13½	11 0
14	11 1
14½	11 2
15	11 2
15½	11 3
16	12 0
16½	12 1
17	12 1
17½	12 2
18	12 2
18½	12 3
19	13 0
19½	13 1
20	13 1

9½ Inches by

In.	In. 4ths.
10	9 3
10½	10 0
11	10 1
11½	10 2
12	10 3
12½	11 0
13	11 0
13½	11 1
14	11 2
14½	11 3
15	12 0
15½	12 1
16	12 1
16½	12 2
17	12 3
17½	13 0
18	13 0
18½	13 1
19	13 2
19½	13 2
20	13 3

10 Inches by

In.	In. 4ths.
10½	10 1
11	10 2
11½	10 3
12	11 0
12½	11 1
13	11 2
13½	11 2
14	11 3
14½	12 0
15	12 1
15½	12 2
16	12 3
16½	12 3
17	13 0
17½	13 1
18	13 2
18½	13 2
19	13 3
19½	14 0
20	14 1

10⅓ Inches by

In.	In. 4ths.
11	10 3
11½	11 0
12	11 1
12½	11 2
13	11 3
13½	12 0
14	12 0
14½	12 1
15	12 2
15½	12 3
16	13 0
16½	13 1
17	13 1
17½	13 2
18	13 3
18½	14 0
19	14 0
19½	14 1
20	14 2
20½	14 3
21	14 3

11 Inches by

In.	In. 4ths.
11½	11 1
12	11 2
12½	11 3
13	12 0
13½	12 1
14	12 2
14½	12 3
15	12 3
15½	13 0
16	13 1
16½	13 2
17	13 3
17½	13 3
18	14 0
18½	14 1
19	14 2
19½	14 3
20	14 3
20½	15 0
21	15 1
21½	15 1
22	15 2

11⅓ Inches by

In.	In. 4ths.
12	11 3
12⅓	12 0
13	12 0
13½	12 1
14	12 2
14½	12 3
15	13 0
15½	13 1
16	13 2
16½	13 3
17	14 0
17½	14 1
18	14 2
18½	14 2
19	14 3
19½	15 0
20	15 1
20½	15 1

In.	In.	4ths.
21	15	2
21½	15	3
22	16	0
22½	16	0
23	16	1

12 Inches by

In.	In.	4ths.
12½	12	1
13	12	2
13½	12	3
14	13	0
14½	13	1
15	13	2
15½	13	3
16	13	3
16½	14	0
17	14	1
17½	14	2
18	14	3
18½	15	0
19	15	0
19½	15	1
20	15	2
20½	15	3
21	15	3
21½	16	0
22	16	1
22½	16	2
23	16	3
23½	16	3
24	17	0

12½ Inches by

In.	In.	4ths.
13	12	3
13½	13	0
14	13	1
14½	13	2
15	13	3
15½	14	0
16	14	1
16½	14	1
17	14	2
17½	14	3

In.	In.	4ths
18	15	0
18½	15	0
19	15	1
19½	15	2
20	15	3
20½	16	0
21	16	1
21½	16	2
22	16	2
22½	16	3
23	17	0
23½	17	1
24	17	1
24½	17	2
25	17	3

13 Inches by

In.	In.	4ths.
13½	13	1
14	13	2
14½	13	3
15	14	0
15½	14	1
16	14	2
16½	14	3
17	14	3
17½	15	0
18	15	1
18½	15	2
19	15	2
19½	15	3
20	16	0
20½	16	1
21	16	2
21½	16	3
22	17	0
22½	17	0
23	17	1
23½	17	2
24	17	3
24½	17	3
25	18	0
25½	18	1
26	18	2

13½ Inches by

In.	In.	4ths.
14	13	3
14½	14	0
15	14	1
15½	14	2
16	14	3
16½	15	0
17	15	1
17½	15	1
18	15	2
18½	15	3
19	16	0
19½	16	1
20	16	2
20½	16	3
21	16	3
21½	17	0
22	17	1
22½	17	2
23	17	2
23½	17	3
24	18	0
24½	18	1
25	18	1
25½	18	2
26	18	3
26½	19	0
27	19	0

14 Inches by

In.	In.	4ths.
14½	14	1
15	14	2
15½	14	3
16	15	0
16½	15	1
17	15	2
17½	15	3
18	15	3
18½	16	0
19	16	1
19½	16	2
20	16	3
20½	17	0
21	17	1

In.	In.	4ths.
21½	17	1
22	17	2
22½	17	3
23	18	0
23½	18	1
24	18	1
24½	18	2
25	18	3
25½	19	0
26	19	0
26½	19	1
27	19	2
27½	19	2
28	19	3

14½ Inches by

In.	In.	4ths.
15	14	3
15½	15	0
16	15	1
16½	15	2
17	15	3
17½	16	0
18	16	1
18½	16	2
19	16	2
19½	16	3
20	17	0
20½	17	1
21	17	2
21½	17	3
22	17	3
22½	18	1
23	18	1
23½	18	2
24	18	3
24½	18	3
25	19	0
25½	19	1
26	19	2
26½	19	2
27	19	3
27½	20	0
28	20	1
28½	20	1
29	20	2

15 Inches by	
In.	In. 4ths.
15½	15 1
16	15 2
16½	15 3
17	16 0
17½	16 1
18	16 2
18½	16 3
19	17 0
19½	17 0
20	17 1
20½	17 2
21	17 3
21½	18 0
22	18 1
22½	18 1
23	18 2
23½	18 3
24	19 0
24½	19 1
25	19 1
25½	19 2
26	19 3
26½	20 0
27	20 0
27½	20 1
28	20 2
28½	20 3
29	20 3
29½	21 0
30	21 1

15½ Inches by	
In.	In. 4ths.
16	15 3
16½	16 0
17	16 1
17½	16 2
18	16 3
18½	17 0
19	17 1
19½	17 2
20	17 2
20½	17 3
21	18 0

In.	In. 4ths.
21½	18 1
22	18 2
22½	18 3
23	18 3
23½	19 0
24	19 1
24½	19 2
25	19 3
25½	19 3
26	20 0
26½	20 1
27	20 2
27½	20 3
28	20 3
28½	21 0
29	21 1
29½	21 2
30	21 3
30½	21 3
31	22 0

16 Inches by	
In.	In. 4ths.
16½	16 1
17	16 2
17½	16 3
18	17 0
18½	17 1
19	17 2
19½	17 3
20	18 0
20½	18 0
21	18 1
21½	18 2
22	18 3
22½	19 0
23	19 1
23½	19 2
24	19 2
24½	19 3
25	20 0
25½	20 1
26	20 2
26½	20 2
27	20 3
27½	21 0

In.	In. 4ths.
28	21 1
28½	21 1
29	21 2
29½	21 3
30	22 0
30½	22 0
31	22 1
31½	22 2
32	22 3

16½ Inches by	
In.	In. 4ths.
17	16 3
17½	17 0
18	17 1
18½	17 2
19	17 3
19½	18 0
20	18 1
20½	18 2
21	18 2
21½	18 3
22	19 0
22½	19 1
23	19 2
23½	19 3
24	20 0
24½	20 0
25	20 1
25½	20 2
26	20 3
26½	20 3
27	21 0
27½	21 1
28	21 2
28½	21 3
29	21 3
29½	22 0
30	22 1
30½	22 2
31	22 2
31½	22 3
32	23 0
32½	23 1
33	23 1

17 Inches by	
In.	In. 4ths.
17½	17 1
18	17 2
18½	17 3
19	18 0
19½	18 1
20	18 2
20½	18 3
21	19 0
21½	19 0
22	19 1
22½	19 2
23	19 3
23½	20 0
24	20 1
24½	20 2
25	20 2
25½	20 3
26	21 0
26½	21 1
27	21 2
27½	21 2
28	21 3
28½	22 0
29	22 1
29½	22 2
30	22 2
30½	22 3
31	23 0
31½	23 1
32	23 1
32½	23 2
33	23 3
33½	23 3
34	24 0

17½ Inches by	
In.	In. 4ths.
18	17 3
18½	18 0
19	18 1
19½	18 2
20	18 3
20½	19 0
21	19 1

In.	In.	4ths.
21½	19	2
22	19	2
22½	19	3
23	20	0
23½	20	1
24	20	2
24½	20	3
25	21	0
25½	21	0
26	21	1
26½	21	2
27	21	3
27½	22	0
28	22	1
28½	22	1
29	22	2
29½	22	3
30	23	0
30½	23	0
31	23	1
31½	23	2
32	23	3
32½	23	3
33	24	0
33½	24	1
34	24	2
34½	24	2
35	24	3

18 Inches by

In.	In.	4ths.
18½	18	1
19	18	2
19½	18	3
20	19	0
20½	19	1
21	19	2
21½	19	3
22	20	0
22½	20	0
23	20	1
23½	20	2
24	20	3
24½	21	0
25	21	1
25½	21	2
26	21	2
26½	21	3
27	22	0
27½	22	1
28	22	2
28½	23	0
29	23	1
29½	23	1

18½ Inches by

In.	In.	4ths.
19	18	3
19½	19	0
20	19	1
20½	19	2
21	19	3
21½	20	0
22	20	1
22½	20	2
23	20	3
23½	20	3
24.	21	0
24½	21	1
25	21	2
25½	21	3
26	22	0
26½	22	1
27	22	1
27½	22	2
28	22	3
28½	23	0
29	23	1
29½	23	1

In.	In.	4ths.
30	23	2
30½	23	3
31	24	0
31½	24	1
32	24	1
32½	24	2
33	24	3
33½	25	0
34	25	0
34½	25	1
35	25	2
35½	25	3
36	25	3
36½	26	0
37	26	1

19 Inches by

In.	In.	4ths.
19½	19	1
20	19	2
20½	19	3
21	20	0
21½	20	1
22	20	2
22½	20	3
23	21	0
23½	21	1
24	21	1
24½	21	2
25	21	3
25½	22	0
26	22	1
26½	22	2
27	22	3
27½	23	3
28	23	0
28½	23	1
29	23	2
29½	23	3
30	23	3
30½	24	0
31	24	1
31½	24	2
32	24	3
32½	24	3
33	25	0

In.	In.	4ths.
33½	25	1
34	25	2
34½	25	2
35	25	3
35½	26	0
36	26	1
36½	26	1
37	26	2
37½	26	3
38	26	3

19½ Inches by

In.	In.	4ths.
20	19	3
20½	20	0
21	20	1
21½	20	2
22	20	3
22½	21	0
23	21	1
23½	21	2
24	21	3
24½	21	3
25	22	0
25½	22	1
26	22	2
26½	22	3
27	23	0
27½	23	1
28	23	1
28½	23	2
29	23	3
29½	24	0
30	24	1
30½	24	2
31	24	2
31½	24	3
32	25	0
32½	25	1
33	25	1
33½	25	2
34	25	3
34½	26	0
35	26	0
35½	26	1
36	26	2

In.	In. 4ths.
$36\frac{1}{2}$	26 3
37	26 3
$37\frac{1}{2}$	27 0
38	27 1
$38\frac{1}{2}$	27 1
39	27 2

20 Inches by

In.	In. 4ths.
$20\frac{1}{2}$	20 1
21	20 2
$21\frac{1}{2}$	20 3
22	21 0
$22\frac{1}{2}$	21 1
23	21 2
$23\frac{1}{2}$	21 3
24	22 0
$24\frac{1}{2}$	22 1
25	22 1
$25\frac{1}{2}$	22 2
26	22 3
$26\frac{1}{2}$	23 0
27	23 1
$27\frac{1}{2}$	23 2
28	23 3
$28\frac{1}{2}$	23 3
29	24 0
$29\frac{1}{2}$	24 1
30	24 2
$30\frac{1}{2}$	24 3
31	25 0
$31\frac{1}{2}$	25 0
32	25 1
$32\frac{1}{2}$	25 2
33	25 3
$33\frac{1}{2}$	26 0
34	26 0
$34\frac{1}{2}$	26 1
35	26 2
$35\frac{1}{2}$	26 3
36	26 3
$36\frac{1}{2}$	27 0
37	27 1
$37\frac{1}{2}$	27 2
38	27 2
$38\frac{1}{2}$	27 3

In.	In. 4ths.
39	28 0
$39\frac{1}{2}$	28 0
40	28 1

$20\frac{1}{2}$ Inches by

In.	In. 4ths.
21	20 3
$21\frac{1}{2}$	21 0
22	21 1
$22\frac{1}{2}$	21 2
23	21 3
$23\frac{1}{2}$	22 0
24	22 1
$24\frac{1}{2}$	22 2
25	22 3
$25\frac{1}{2}$	22 3
26	23 0
$26\frac{1}{2}$	23 1
27	23 2
$27\frac{1}{2}$	23 3
28	24 0
$28\frac{1}{2}$	24 1
29	24 1
$29\frac{1}{2}$	24 2
30	24 3
$30\frac{1}{2}$	25 0
31	25 1
$31\frac{1}{2}$	25 2
32	25 2
$32\frac{1}{2}$	25 3
33	26 0
$33\frac{1}{2}$	26 1
34	26 2
$34\frac{1}{2}$	26 2
35	26 3
$35\frac{1}{2}$	27 0
36	27 1
$36\frac{1}{2}$	27 1
37	27 2
$37\frac{1}{2}$	27 3
38	28 0
$38\frac{1}{2}$	28 0
39	28 1
$39\frac{1}{2}$	28 2
40	28 3
$40\frac{1}{2}$	28 3

In.	In. 4ths.
41	29 0

21 Inches by

In.	In. 4ths.
$21\frac{1}{2}$	21 1
22	21 2
$22\frac{1}{2}$	21 3
23	22 0
$23\frac{1}{2}$	22 1
24	22 2
$24\frac{1}{2}$	22 3
25	23 0
$25\frac{1}{2}$	23 1
26	23 1
$26\frac{1}{2}$	23 2
27	23 3
$27\frac{1}{2}$	24 0
28	24 1
$28\frac{1}{2}$	24 2
29	24 3
$29\frac{1}{2}$	25 0
30	25 0
$30\frac{1}{2}$	25 1
31	25 2
$31\frac{1}{2}$	25 3
32	26 0
$32\frac{1}{2}$	26 0
33	26 1
$33\frac{1}{2}$	26 2
34	26 3
$34\frac{1}{2}$	27 0
35	27 0
$35\frac{1}{2}$	27 1
36	27 2
$36\frac{1}{2}$	27 3
37	27 3
$37\frac{1}{2}$	28 0
38	28 1
$38\frac{1}{2}$	28 2
39	28 2
$39\frac{1}{2}$	28 3
40	29 0
$40\frac{1}{2}$	29 1
41	29 1
$41\frac{1}{2}$	29 2
42	29 3

$21\frac{1}{2}$ Inches by

In.	In. 4ths.
22	21 3
$22\frac{1}{2}$	22 0
23	22 1
$23\frac{1}{2}$	22 2
24	22 3
$24\frac{1}{2}$	23 0
25	23 1
$25\frac{1}{2}$	23 2
26	23 3
$26\frac{1}{2}$	23 3
27	24 0
$27\frac{1}{2}$	24 1
28	24 2
$28\frac{1}{2}$	24 3
29	25 0
$29\frac{1}{2}$	25 1
30	25 2
$30\frac{1}{2}$	25 2
31	25 3
$31\frac{1}{2}$	26 0
32	26 1
$32\frac{1}{2}$	26 2
33	26 2
$33\frac{1}{2}$	26 3
34	27 0
$34\frac{1}{2}$	27 1
35	27 2
$35\frac{1}{2}$	27 3
36	27 3
$36\frac{1}{2}$	28 0
37	28 1
$37\frac{1}{2}$	28 2
38	28 2
$38\frac{1}{2}$	28 3
39	29 0
$39\frac{1}{2}$	29 1
40	29 1
$40\frac{1}{2}$	29 2
41	29 3
$41\frac{1}{2}$	29 3
42	30 0
$42\frac{1}{2}$	30 1
43	30 2

22 Inches by			22½ Inches by			23 Inches by			In.	In. 4ths.	
									46	32	3
In.	In.	4ths.	In.	In.	4ths.	In.	In.	4ths.			
22½	22	1	23	22	3	23½	23	1	23½ Inches by		
23	22	2	23½	23	0	24	23	2			
23½	22	3	24	23	1	24½	23	3	In.	In.	4ths.
24	23	0	24½	23	2	25	24	0	24	23	3
24½	23	1	25	23	3	25½	24	1	24½	24	0
25	23	2	25½	24	0	26	24	2	25	24	1
25½	23	3	26	24	1	26½	24	3	25½	24	2
26	24	0	26½	24	2	27	25	0	26	24	3
26½	24	1	27	24	3	27½	25	1	26½	25	0
27	24	1	27½	24	3	28	25	2	27	25	1
27½	24	2	28	25	0	28½	25	2	27½	25	2
28	24	3	28½	25	1	29	25	3	28	25	3
28½	25	0	29	25	2	29½	26	0	28½	25	3
29	25	1	29½	25	3	30	26	1	29	26	0
29½	25	2	30	26	0	30½	26	2	29½	26	1
30	25	3	30½	26	1	31	26	3	30	26	2
30½	26	0	31	26	2	31½	27	0	30½	26	3
31	26	0	31½	26	2	32	27	1	31	27	0
31½	26	1	32	26	3	32½	27	1	31½	27	1
32	26	2	32½	27	0	33	27	2	32	27	2
32½	26	3	33	27	1	33½	27	3	32½	27	3
33	27	0	33½	27	2	34	28	0	33	27	3
33½	27	1	34	27	3	34½	28	1	33½	28	0
34	27	1	34½	27	3	35	28	1	34	28	1
34½	27	2	35	28	0	35½	28	2	34½	28	2
35	27	3	35½	28	1	36	28	3	35	28	3
35½	28	0	36	28	2	36½	29	0	35½	29	0
36	28	1	36½	28	3	37	29	1	36	29	0
36½	28	1	37	28	3	37½	29	1	36½	29	1
37	28	2	37½	29	0	38	29	2	37	29	2
37½	28	3	38	29	1	38½	29	3	37½	29	3
38	29	0	38½	29	2	39	30	0	38	29	3
38½	29	0	39	29	2	39½	30	1	38½	30	0
39	29	1	39½	29	3	40	30	1	39	30	1
39½	29	2	40	30	0	40½	30	2	39½	30	2
40	29	3	40½	30	1	41	30	3	40	30	3
40½	29	3	41	30	1	41½	31	0	40½	30	3
41	30	0	41½	30	2	42	31	0	41	31	0
41½	30	1	42	30	3	42½	31	1	41½	31	1
42	30	2	42½	31	0	43	31	2	42	31	2
42½	30	2	43	31	0	43½	31	3	42½	31	2
43	30	3	43½	31	1	44	32	0	43	31	3
43½	31	0	44	31	2	44½	32	0	43½	32	0
44	31	0	44½	31	3	45	32	1	44	32	1
			45	31	3	45½	32	2	44½	32	1

In.	In. 4ths.
45	32 2
45½	32 3
46	33 0
46½	33 0
47	33 1

24 Inches by

In.	In. 4ths.
24½	24 1
25	24 2
25½	24 3
26	25 0
26½	25 1
27	25 2
27½	25 3
28	26 0
28½	26 1
29	26 1
29½	26 2
30	26 3
30½	27 0
31	27 1
31½	27 2
32	27 3
32½	28 0
33	28 1
33½	28 1
34	28 2
34½	28 3
35	29 0
35½	29 1
36	29 2
36½	29 2
37	29 3
37½	30 0
38	30 1
38½	30 2
39	30 2
39½	30 3
40	31 0
40½	31 1
41	31 1
41½	31 2
42	31 3
42½	32 0
43	32 0

In.	In. 4ths.
43½	32 1
44	32 2
44½	32 3
45	32 3
45½	33 0
46	33 1
46½	33 2
47	33 2
47½	33 3
48	34 0

24½ Inches by

In.	In. 4ths.
25	24 3
25½	25 0
26	25 1
26½	25 2
27	25 3
27½	26 0
28	26 1
28½	26 2
29	26 3
29½	27 0
30	27 0
30½	27 1
31	27 2
31½	27 3
32	28 0
32½	28 1
33	28 2
33½	28 3
34	28 3
34½	29 0
35	29 1
35½	29 2
36	29 3
36½	30 0
37	30 1
37½	30 1
38	30 2
38½	30 3
39	31 0
39½	31 0
40	31 1
40½	31 2
41	31 3

In.	In. 4ths.
41½	31 3
42	32 0
42½	32 1
43	32 2
43½	32 3
44	32 3
44½	33 0
45	33 1
45½	33 2
46	33 2
46½	33 3
47	34 0
47½	34 0
48	34 1
48½	34 2
49	34 3

25 Inches by

In.	In. 4ths.
25½	25 1
26	25 2
26½	25 3
27	26 0
27½	26 1
28	26 2
28½	26 3
29	27 0
29½	27 1
30	27 1
30½	27 2
31	27 3
31½	28 0
32	28 1
32½	28 2
33	28 3
33½	29 0
34	29 1
34½	29 1
35	29 2
35½	29 3
36	30 0
36½	30 1
37	30 2
37½	30 2
38	30 3
38½	31 0

In.	In. 4ths.
39	31 1
39½	31 2
40	31 2
40½	31 3
41	32 0
41½	32 1
42	32 2
42½	32 2
43	32 3
43½	33 0
44	33 1
44½	33 1
45	33 2
45½	33 3
46	34 0
46½	34 0
47	34 1
47½	34 2
48	34 3
48½	34 3
49	35 0
49½	35 1
50	35 1

25½ Inches by

In.	In. 4ths.
26	25 3
26½	26 0
27	26 1
27½	26 2
28	26 3
28½	27 0
29	27 1
29½	27 2
30	27 3
30½	27 3
31	28 0
31½	28 1
32	28 2
32½	28 3
33	29 0
33½	29 1
34	29 2
34½	29 3
35	29 3
35½	30 0

In.	In.	4ths.
36	30	1
36½	30	2
37	30	3
37½	31	0
38	31	1
38½	31	1
39	31	2
39½	31	3
40	32	0
40½	32	0
41	32	1
41½	32	2
42	32	3
42½	33	0
43	33	0
43½	33	1
44	33	2
44½	33	3
45	33	3
45½	34	0
46	34	1
46½	34	2
47	34	3
47½	34	3
48	35	0
48½	35	1
49	35	1
49½	35	2
50	35	3
50½	36	0
51	36	0

26 Inches by

In.	In.	4ths.
26½	26	1
27	26	2
27½	26	3
28	27	0
28½	27	1
29	27	2
29½	27	3
30	28	0
30½	28	1
31	28	2
31½	28	2
32	28	3

In.	In.	4ths.
32½	29	0
33	29	1
33½	29	2
34	29	3
34½	30	0
35	30	1
35½	30	2
36	30	2
36½	30	3
37	31	0
37½	31	1
38	31	2
38½	31	3
39	32	0
39½	32	1
40	32	2
40½	32	3
41	33	0
41½	33	0
42	33	1
42½	33	2
43	33	3
43½	34	0
44	34	1
44½	34	2
45	34	2
45½	34	3
46	35	0
46½	35	0
47	35	1
47½	35	2
48	35	3
48½	35	3
49	36	0
49½	36	1
50	36	2
50½	36	2
51	36	3
51½	37	0

In.	In.	4ths.
28½	27	3
29	27	3
29½	28	0
30	28	1
30½	28	2
31	28	3
31½	28	3
32	29	0
32½	29	1
33	29	2
33½	29	3
34	30	0
34½	30	1
35	30	2
35½	30	3
36	31	0
36½	31	0
37	31	1
37½	31	2
38	31	3
38½	32	0
39	32	1
39½	32	1
40	32	2
40½	32	3
41	33	0
41½	33	1
42	33	1
42½	33	2
43	33	3
43½	34	0
44	34	1
44½	34	1
45	34	2
45½	34	3
46	35	0
46½	35	0
47	35	1
47½	35	2
48	35	3
48½	35	3
49	36	0
49½	36	1
50	36	2
50½	36	2
51	36	3
51½	37	0

In.	In.	4ths.
52	37	0
52½	37	1
53	37	2

27 Inches by

In.	In.	4ths.
27½	27	1
28	27	2
28½	27	3
29	28	0
29½	28	1
30	28	2
30½	28	3
31	29	0
31½	29	1
32	29	2
32½	29	2
33	29	3
33½	30	0
34	30	1
34½	30	2
35	30	3
35½	31	0
36	31	1
36½	31	2
37	31	2
37½	31	3
38	32	0
38½	32	1
39	32	2
39½	32	3
40	32	3
40½	33	0
41	33	1
41½	33	2
42	33	3
42½	33	3
43	34	0
43½	34	1
44	34	2
44½	34	3
45	35	0
45½	35	0
46	35	1
46½	35	2
47	35	2

26½ Inches by

In.	In.	4ths.
27	26	3
27½	27	1
28	27	2

In.	In.	4ths.
47½	35	3
48	36	0
48½	36	1
49	36	2
49½	36	2
50	36	3
50½	37	0
51	37	0
51½	37	1
52	37	2
52½	37	3
53	37	3
53½	38	0
54	38	1

27½ Inches by

In.	In.	4ths.
28	27	3
28½	28	0
29	28	1
29½	28	2
30	28	3
30½	29	0
31	29	1
31½	29	2
32	29	3
32½	29	3
33	30	0
33½	30	1
34	30	2
34½	30	3
35	31	0
35½	31	1
36	31	2
36½	31	3
37	32	0
37½	32	0
38	32	1
38½	32	2
39	32	3
39½	33	0
40	33	1
40½	33	1
41	33	2
41½	33	3
42	34	0

In.	In.	4ths.
42½	34	1
43	34	2
43½	34	2
44	34	3
44½	35	0
45	35	1
45½	35	1
46	35	2
46½	35	3
47	36	0
47½	36	1
48	36	1
48½	36	2
49	36	3
49½	37	0
50	37	0
50½	37	1
51	37	2
51½	37	2
52	37	3
52½	38	0
53	38	1
53½	38	1
54	38	2
54½	38	2
55	38	3

28 Inches by

In.	In.	4ths.
28½	28	1
29	28	2
29½	28	3
30	29	0
30½	29	1
31	29	2
31½	29	3
32	30	0
32½	30	1
33	30	2
33½	30	3
34	30	3
34½	31	0
35	31	1
35½	31	2
36	31	3
36½	32	0

In.	In.	4ths.
37	32	1
37½	32	2
38	32	2
38½	32	3
39	33	0
39½	33	1
40	33	2
40½	33	3
41	34	0
41½	34	0
42	34	1
42½	34	2
43	34	3
43½	35	0
44	35	0
44½	35	1
45	35	2
45½	35	3
46	36	0
46½	36	0
47	36	1
47½	36	2
48	36	3
48½	36	3
49	37	0
49½	37	1
50	37	2
50½	37	2
51	37	3
51½	38	0
52	38	1
52½	38	1
53	38	2
53½	38	3
54	39	0
54½	39	0
55	39	1
55½	39	2
56	39	3

28½ Inches by

In.	In.	4ths.
29	28	3
29½	29	0
30	29	1
30½	29	2

In.	In.	4ths.
31	29	3
31½	30	0
32	30	1
32½	30	2
33	30	3
33½	31	0
34	31	1
34½	31	1
35	31	2
35½	31	3
36	32	0
36½	32	1
37	32	2
37½	32	3
38	33	0
38½	33	0
39	33	1
39½	33	2
40	33	3
40½	34	0
41	34	1
41½	34	2
42	34	2
42½	34	3
43	35	0
43½	35	1
44	35	2
44½	35	2
45	35	3
45½	36	0
46	36	1
46½	36	2
47	36	2
47½	36	3
48	37	0
48½	37	1
49	37	1
49½	37	2
50	37	3
50½	38	0
51	38	0
51½	38	1
52	38	2
52½	38	3
53	38	3
53½	39	0
54	39	1

In.	In.	4ths.
54½	39	1
55	39	2
55½	39	3
56	39	3
56½	40	0
57	40	1

29 Inches by

In.	In.	4ths.
29½	29	1
30	29	2
30½	29	3
31	30	0
31½	30	1
32	30	2
32½	30	3
33	31	0
33½	31	1
34	31	2
34½	31	3
35	31	3
35½	32	0
36	32	1
36½	32	2
37	32	3
37½	33	0
38	33	1
38½	33	2
39	33	3
39½	33	3
40	34	0
40½	34	1
41	34	2
41½	34	3
42	35	0
42½	35	0
43	35	1
43½	35	2
44	35	3
44½	36	0
45	36	0
45½	36	1
46	36	2
46½	36	3
47	37	0
47½	37	0

In.	In.	4ths.
48	37	1
48½	37	2
49	37	3
49½	38	0
50	38	0
50½	38	1
51	38	2
51½	38	3
52	38	3
52½	39	0
53	39	1
53½	39	2
54	39	2
54½	39	3
55	39	3
55½	40	0
56	40	0
56½	40	1
57	40	2
57½	40	2
58	40	3

29½ Inches by

In.	In.	4ths.
30	29	3
30½	30	0
31	30	1
31½	30	2
32	30	3
32½	31	0
33	31	1
33½	31	2
34	31	3
34½	32	0
35	32	0
35½	32	1
36	32	2
36½	32	3
37	33	0
37½	33	1
38	33	2
38½	33	3
39	34	0
39½	34	1
40	34	1
40½	34	2

In.	In.	4ths.
41	34	3
41½	35	0
42	35	1
42½	35	2
43	35	2
43½	35	3
44	36	0
44½	36	1
45	36	2
45½	36	3
46	36	3
46½	37	0
47	37	1
47½	37	2
48	37	3
48½	37	3
49	38	0
49½	38	1
50	38	2
50½	38	2
51	38	3
51½	39	0
52	39	1
52½	39	1
53	39	2
53½	39	3
54	40	0
54½	40	0
55	40	1
55½	40	2
56	40	2
56½	40	3
57	41	0
57½	41	0
58	41	1
58½	41	2
59	41	2

30 Inches by

In.	In.	4ths.
30½	30	1
31	30	2
31½	30	3
32	31	0
32½	31	1
33	31	2

In.	In.	4ths.
33½	31	3
34	32	0
34½	32	1
35	32	2
35½	32	3
36	32	3
36½	33	0
37	33	1
37½	33	2
38	33	3
38½	34	0
39	34	1
39½	34	2
40	34	3
40½	34	3
41	35	0
41½	35	1
42	35	2
42½	35	3
43	36	0
43½	36	0
44	36	1
44½	36	2
45	36	3
45½	37	0
46	37	1
46½	37	1
47	37	2
47½	37	3
48	38	0
48½	38	1
49	38	1
49½	38	2
50	38	3
50½	39	0
51	39	0
51½	39	1
52	39	2
52½	39	3
53	39	3
53½	40	0
54	40	0
54½	40	1
55	40	1
55½	40	2
56	40	3
56½	41	0

In.	In.	4ths.
57	41	1
57½	41	1
58	41	2
58½	41	3
59	42	0
59½	42	1
60	42	2

30¾ Inches by

In.	In.	4ths.
31	30	3
31½	31	0
32	31	1
32½	31	2
33	31	3
33½	32	0
34	32	1
34½	32	2
35	32	3
35⅓	33	0
36	33	1
36½	33	1
37	33	2
37½	33	3
38	34	0
38½	34	1
39	34	2
39½	34	3
40	35	0
40½	35	1
41	35	1
41½	35	2
42	35	3
42½	36	0
43	36	1
43½	36	2
44	36	3
44½	36	3
45	37	0
45½	37	1
46	37	2
46½	37	3
47	37	3
47½	38	0
48	38	1
48½	38	2

In.	In.	4ths.
49	38	3
49½	38	3
50	39	0
50½	39	1
51	39	2
51½	39	2
52	39	3
52½	40	0
53	40	1
53½	40	1
54	40	2
54½	40	2
55	40	3
55½	41	0
56	41	1
56½	41	2
57	41	3
57½	41	3
58	42	0
58½	42	1
59	42	2
59½	42	2
60	42	3

31 Inches by

In.	In.	4ths.
31½	31	1
32	31	2
32½	31	3
33	32	0
33½	32	1
34	32	2
34½	32	3
35	33	0
35½	33	1
36	33	2
36½	33	3
37	33	3
37½	34	0
38	34	1
38½	34	2
39	34	3
39½	35	0
40	35	1
40½	35	2
41	35	3

In.	In.	4ths.
41½	35	3
42	36	0
42½	36	1
43	36	2
43½	36	3
44	37	0
44½	37	1
45	37	1
45½	37	2
46	37	3
46½	38	0
47	38	1
47½	38	1
48	38	2
48½	38	3
49	39	0
49½	39	1
50	39	1
50½	39	2
51	39	3
51½	40	0
52	40	1
52½	40	1
53	40	2
53½	40	3
54	40	3
54½	41	0
55	41	1
55½	41	2
56	41	2
56½	41	3
57	42	0
57½	42	0
58	42	1
58½	42	2
59	42	3
59½	42	3
60	43	0

31½ Inches by

In.	In.	4ths.
32	31	3
32½	32	0
33	32	1
33½	32	2
34	32	3

In.	In.	4ths.
34½	33	0
35	33	1
35½	33	2
36	33	3
36½	34	0
37	34	1
37½	34	1
38	34	2
38½	34	3
39	35	0
39½	35	1
40	35	2
40½	35	3
41	36	0
41½	36	1
42	36	1
42½	36	2
43	36	3
43½	37	0
44	37	1
44½	37	2
45	37	3
45½	38	0
46	38	1
46½	38	2
47	38	3
47½	39	0
48	39	0
48½	39	0
49	39	1
49½	39	2
50	39	3
50½	40	0
51	40	0
51½	40	1
52	40	2
52½	40	3
53	40	3
53½	41	0
54	41	1
54½	41	1
55	41	2
55½	41	3
56	42	0
56½	42	0
57	42	1
57½	42	2

In.	In.	4ths.
58	42	3
58½	43	0
59	43	0
59½	43	1
60	43	2

32 Inches by

In.	In.	4ths.
32½	32	1
33	32	2
33½	32	3
34	33	0
34½	33	1
35	33	2
35½	33	3
36	34	0
36½	34	1
37	34	2
37½	34	3
38	34	3
38½	35	0
39	35	1
39½	35	2
40	35	3
40½	36	0
41	36	1
41½	36	2
42	36	3
42½	37	0
43	37	0
43½	37	1
44	37	2
44½	37	3
45	38	0
45½	38	1
46	38	1
46½	38	2
47	38	3
47½	39	0
48	39	1
48½	39	2
49	39	2
49½	39	3
50	40	0
50½	40	0
51	40	1

In.	In.	4ths.
51½	40	2
52	40	3
52½	41	0
53	41	0
53½	41	1
54	41	2
54½	41	2
55	41	3
55½	42	0
56	42	1
56½	42	2
57	42	3
57½	42	3
58	43	0
58½	43	1
59	43	2
59½	43	3
60	43	3

32⅓ Inches by

In.	In.	4ths.
33	32	3
33½	33	0
34	33	1
34½	33	2
35	33	3
35½	34	0
36	34	1
36½	34	2
37	34	3
37½	35	0
38	35	1
38½	35	2
39	35	2
39½	35	3
40	36	0
40½	36	1
41	36	2
41½	36	3
42	37	0
42½	37	1
43	37	2
43½	37	2
44	37	3
44½	38	0
45	38	1

In.	In.	4ths.
45½	38	2
46	38	3
46½	38	3
47	39	0
47½	39	1
48	39	2
48½	39	3
49	40	0
49½	40	0
50	40	1
50½	40	2
51	40	3
51½	41	0
52	41	0
52½	41	1
53	41	2
53½	41	3
54	42	0
54½	42	0
55	42	1
55½	42	1
56	42	2
56½	42	3
57	43	0
57½	43	0
58	43	1
58½	43	2
59	43	3
59½	43	3
60	44	0

33 Inches by

In.	In.	4ths.
33½	33	1
34	33	2
34½	33	3
35	34	0
35½	34	1
36	34	2
36½	34	3
37	35	0
37½	35	1
38	35	2
38½	35	3
39	35	3
39½	36	0

In.	In.	4ths.
40	36	1
40½	36	2
41	36	3
41½	37	0
42	37	1
42½	37	2
43	37	3
43½	38	0
44	38	0
44½	38	1
45	38	2
45½	38	2
46	38	3
46½	39	0
47	39	1
47½	39	2
48	39	3
48½	39	3
49	40	0
49½	40	1
50	40	2
50½	40	3
51	40	3
51½	41	0
52	41	1
52½	41	1
53	41	2
53½	41	3
54	42	0
54½	42	1
55	42	2
55½	42	3
56	43	0
56½	43	0
57	43	1
57½	43	2
58	43	3
58½	44	0
59	44	0
59½	44	1
60	44	2

33⅓ Inches by

In.	In.	4ths.
34	33	3
34½	34	0

In.	In.	4ths.
35	34	1
35½	34	2
36	34	3
36½	35	0
37	35	1
37½	35	2
38	35	3
38½	36	0
39	36	1
39½	36	2
40	36	2
40½	36	3
41	37	0
41½	37	1
42	37	2
42½	37	3
43	38	0
43½	38	1
44	38	2
44½	38	2
45	38	3
45½	39	0
46	39	1
46½	39	2
47	39	3
47½	40	0
48	40	0
48½	40	1
49	40	2
49½	40	3
50	41	0
50½	41	1
51	41	1
51½	41	2
52	41	3
52½	42	0
53	42	1
53½	42	1
54	42	2
54½	42	3
55	42	3
55½	43	0
56	43	1
56½	43	2
57	43	3
57½	44	0
58	44	0
58½	44	1
59	44	2
59½	44	3
60	44	3

34 Inches by

In.	In.	4ths.
34½	34	1
35	34	2
35½	34	3
36	35	0
36½	35	1
37	35	2
37½	35	2
38	35	3
38½	36	0
39	36	1
39½	36	2
40	36	3
40½	37	0
41	37	1
41½	37	2
42	37	3
42½	38	0
43	38	0
43½	38	1
44	38	2
44½	38	3
45	39	0
45½	39	1
46	39	2
46½	39	3
47	40	0
47½	40	1
48	40	2
48½	40	2
49	40	3
49½	41	0
50	41	1
50½	41	1
51	41	2
51½	41	3
52	42	0
52½	42	1
53	42	2
53½	42	2
54	42	3
54½	43	0
55	43	1
55½	43	2
56	43	3
56½	43	3
57	44	0
57½	44	0
58	44	1
58½	44	2
59	44	3
59½	45	0
60	45	0

34½ Inches by

In.	In.	4ths.
35	34	3
35½	35	0
36	35	1
36½	35	2
37	35	3
37½	36	0
38	36	1
38½	36	2
39	36	3
39½	37	0
40	37	1
40½	37	2
41	37	2
41½	37	3
42	38	0
42½	38	1
43	38	2
43½	38	3
44	39	0
44½	39	1
45	39	2
45½	39	2
46	39	3
46½	40	0
47	40	1
47½	40	2
48	40	3
48½	41	0
49	41	0
49½	41	1
50	41	2
50½	41	3
51	42	0
51½	42	1
52	42	1
52½	42	2
53	42	3
53½	43	0
54	43	0
54½	43	1
55	43	2
55½	43	3
56	44	0
56½	44	0
57	44	1
57½	44	2
58	44	3
58½	44	3
59	45	0
59½	45	1
60	45	2

35 Inches by

In.	In.	4ths.
35½	35	1
36	35	2
36½	35	3
37	36	0
37½	36	1
38	36	2
38½	36	3
39	37	0
39½	37	1
40	37	2
40½	37	3
41	38	0
41½	38	1
42	38	2
42½	38	2
43	38	3
43½	39	0
44	39	1
44½	39	2
45	39	3
45½	40	0
46	40	0

In.	In.	4ths.
46½	40	1
47	40	2
47½	40	3
48	41	0
48½	41	1
49	41	2
49½	41	2
50	41	3
50½	42	0
51	42	1
51½	42	2
52	42	3
52½	42	3
53	43	0
53½	43	1
54	43	2
54½	43	2
55	43	3
55½	44	0
56	44	1
56½	44	2
57	44	2
57½	44	3
58	45	0
58½	45	1
59	45	2
59½	45	2
60	45	3

35¼ Inches by

In.	In.	4ths.
36	35	3
36½	36	0
37	36	1
37½	36	2
38	36	3
38½	37	0
39	37	1
39½	37	2
40	37	3
40½	38	0
41	38	1
41½	38	2
42	38	2
42½	38	3
43	39	0

In	In.	4ths.
43½	39	1
44	39	2
44½	39	3
45	40	0
45½	40	1
46	40	2
46½	40	2
47	40	3
47½	41	0
48	41	1
48½	41	2
49	41	3
49½	42	0
50	42	1
50½	42	1
51	42	2
51½	42	3
52	43	0
52½	43	1
53	43	2
53½	43	2
54	43	3
54½	44	0
55	44	1
55½	44	2
56	44	2
56½	44	3
57	45	0
57½	45	1
58	45	2
58½	45	2
59	45	3
59½	46	0
60	46	1

36 Inches by

In.	In.	4ths.
36½	36	1
37	36	2
37½	36	3
38	37	0
38½	37	1
39	37	2
39½	37	3
40	38	0
40½	38	1

In.	In.	4ths.
41	38	2
41½	38	3
42	39	0
42½	39	0
43	39	1
43½	39	2
44	39	3
44½	40	0
45	40	1
45½	40	2
46	40	3
46½	41	0
47	41	1
47½	41	1
48	41	2
48½	41	3
49	42	0
49½	42	1
50	42	2
50½	42	3
51	42	3
51½	43	0
52	43	1
52½	43	2
53	43	3
53½	44	0
54	44	0
54½	44	1
55	44	2
55½	44	2
56	44	3
56½	45	0
57	45	1
57½	45	2
58	45	3
58½	45	3
59	46	0
59½	46	1
60	46	2

39¾ Inches by

In.	In.	4ths.
37	36	3
37½	37	0
38	37	1
38½	37	2

In.	In.	4ths.
39	37	3
39½	38	0
40	38	1
40½	38	2
41	38	3
41½	39	0
42	39	1
42½	39	2
43	39	2
43½	39	3
44	40	0
44½	40	1
45	40	2
45½	40	3
46	41	0
46½	41	1
47	41	2
47½	41	3
48	42	0
48½	42	0
49	42	1
49½	42	2
50	42	3
50½	43	0
51	43	1
51½	43	1
52	43	2
52½	43	3
53	44	0
53½	44	0
54	44	1
54½	44	2
55	44	3
55½	45	0
56	45	0
56½	45	1
57	45	2
57½	45	2
58	45	3
58½	46	0
59	46	1
59½	46	2
60	46	3

37 Inches by	
In.	In. 4ths.
37½	37 1
38	37 2
38½	37 3
39	38 0
39½	38 1
40	38 2
40½	38 3
41	39 0
41½	39 1
42	39 2
42½	39 3
43	40 0
43½	40 0
44	40 1
44½	40 2
45	40 3
45½	41 0
46	41 1
46½	41 2
47	41 3
47½	42 0
48	42 1
48½	42 1
49	42 2
49½	42 3
50	43 0
50½	43 1
51	43 2
51½	43 3
52	43 3
52½	44 0
53	44 1
53½	44 2
54	44 2
54½	44 3
55	45 0
55½	45 1
56	45 2
56½	45 2
57	45 3
57½	46 0
58	46 1
58½	46 2
59	46 3
59½	47 0

In.	In. 4ths.
60	47 0

37½ Inches by	
In.	In. 4ths.
38	37 3
38½	38 0
39	38 1
39½	38 2
40	38 3
40½	39 0
41	39 1
41½	39 2
42	39 3
42½	40 0
43	40 1
43½	40 2
44	40 3
44½	41 0
45	41 1
45½	41 2
46	41 3
46½	42 0
47	42 1
47½	42 1
48	42 2
48½	42 3
49	43 0
49½	43 1
50	43 2
50½	43 2
51	43 3
51½	44 0
52	44 1
52½	44 1
53	44 2
53½	44 3
54	45 0
54½	45 0
55	45 1
55½	45 2
56	45 3
56½	46 0
57	46 1
57½	46 2
58	46 3
58½	46 3

In.	In. 4ths.
59	47 0
59½	47 1
60	47 2

38 Inches by	
In.	In. 4ths
38½	38 1
39	38 2
39½	38 3
40	39 0
40½	39 1
41	39 2
41½	39 3
42	40 0
42½	40 1
43	40 2
43½	40 3
44	41 0
44½	41 0
45	41 1
45½	41 2
46	41 3
46½	42 0
47	42 1
47½	42 1
48	42 2
48½	42 3
49	43 0
49½	43 1
50	43 2
50½	43 3
51	44 0
51½	44 0
52	44 1
52½	44 2
53	44 3
53½	45 0
54	45 1
54½	45 2
55	45 3
55½	46 0
56	46 1
56½	46 1
57	46 2
57½	46 3
58	47 0

In.	In. 4ths.
58½	47 1
59	47 1
59½	47 2
60	47 3

38½ Inches by	
In.	In. 4ths.
39	38 3
39½	39 0
40	39 1
40½	39 2
41	39 3
41½	40 0
42	40 1
42½	40 2
43	40 3
43½	41 0
44	41 1
44½	41 2
45	41 2
45½	41 3
46	42 0
46½	42 1
47	42 2
47½	42 3
48	43 0
48½	43 1
49	43 2
49½	43 3
50	43 3
50½	44 0
51	44 1
51½	44 2
52	44 3
52½	45 0
53	45 1
53½	45 1
54	45 2
54½	45 3
55	46 0
55½	46 1
56	46 2
56½	46 3
57	47 0
57½	47 0
58	47 1

In.	In. 4ths.
58½	47 2
59	47 3
59½	48 0
60	48 0

39 Inches by

In.	In. 4ths.
39½	39 1
40	39 2
40½	39 3
41	40 0
41½	40 1
42	40 2
42½	40 3
43	41 0
43½	41 1
44	41 2
44½	41 3
45	42 0
45½	42 0
46	42 1
46½	42 2
47	42 3
47½	43 0
48	43 1
48½	43 2
49	43 3
49½	44 0
50	44 1
50½	44 1
51	44 2
51½	44 3
52	45 0
52½	45 1
53	45 2
53½	45 3
54	46 0
54½	46 0
55	46 1
55½	46 2
56	46 3
56½	47 0
57	47 0
57½	47 1
58	47 2
58½	47 3
59	48 0
59½	48 0
60	48 1

39½ Inches by

In.	In. 4ths.
40	39 3
40½	40 0
41	40 1
41½	40 2
42	40 3
42½	41 0
43	41 1
43½	41 2
44	41 3
44½	42 0
45	42 1
45½	42 2
46	42 3
46½	43 0
47	43 0
47½	43 1
48	43 2
48½	43 3
49	44 0
49½	44 1
50	44 2
50½	44 3
51	45 0
51½	45 1
52	45 1
52½	45 2
53	45 3
53½	46 0
54	46 0
54½	46 1
55	46 2
55½	46 3
56	47 0
56½	47 1
57	47 2
57½	47 3
58	48 0
58½	48 1
59	48 2
59½	48 3
60	49 0

40 Inches by

In.	In. 4ths.
40½	40 1
41	40 2
41½	40 3
42	41 0
42½	41 1
43	41 2
43½	41 3
44	42 0
44½	42 1
45	42 2
45½	42 3
46	43 0
46½	43 1
47	43 1
47½	43 2
48	43 3
48½	44 0
49	44 1
49½	44 2
50	44 3
50½	45 0
51	45 1
51½	45 2
52	45 2
52½	45 3
53	46 0
53½	46 1
54	46 2
54½	46 3
55	47 0
55½	47 0
56	47 1
56½	47 2
57	47 3
57½	47 3
58	48 0
58½	48 1
59	48 2
59½	48 3
60	49 0

40½ Inches by

In.	In. 4ths.
41	40 3
41½	41 0
42	41 1
42½	41 2
43	41 3
43½	42 0
44	42 1
44½	42 2
45	42 3
45½	43 0
46	43 1
46½	43 2
47	43 2
47½	43 3
48	44 0
48½	44 1
49	44 2
49½	44 3
50	45 0
50½	45 1
51	45 2
51½	45 3
52	46 0
52½	46 0
53	46 1
53½	46 2
54	46 3
54½	47 0
55	47 1
55½	47 2
56	47 2
56½	47 3
57	48 0
57½	48 1
58	48 2
58½	48 3
59	49 0
59½	49 0
60	49 1

41 Inches by

In.	In. 4ths.
41½	41 1
42	41 2

In.	In.	4ths.
42½	41	3
43	42	0
43½	42	1
44	42	2
44½	42	3
45	43	0
45½	43	1
46	43	2
46½	43	3
47	44	0
47½	44	1
48	44	1
48½	44	2
49	44	3
49½	45	0
50	45	1
50½	45	2
51	45	3
51½	46	0
52	46	1
52½	46	2
53	46	2
53½	46	3
54	47	0
54½	47	1
55	47	2
55½	47	3
56	48	0
56½	48	0
57	48	1
57½	48	2
58	48	3
58½	49	0
59	49	0
59½	49	1
60	49	2

41¼ Inches by

In.	In.	4ths.
42	41	3
42½	42	0
43	42	1
43½	42	2
44	42	3
44½	43	0
45	43	1

In.	In.	4ths.
45½	43	2
46	43	3
46½	44	0
47	44	1
47½	44	2
48	44	3
48½	45	0
49	45	1
49½	45	1
50	45	2
50½	45	3
51	46	0
51½	46	1
52	46	2
52½	46	3
53	47	0
53½	47	0
54	47	1
54½	47	2
55	47	3
55½	48	0
56	48	1
56½	48	2
57	48	2
57½	48	3
58	49	0
58½	49	1
59	49	2
59½	49	3
60	50	0

42 Inches by

In.	In.	4ths.
42½	42	1
43	42	2
43½	42	3
44	43	0
44½	43	1
45	43	2
45½	43	3
46	44	0
46½	44	1
47	44	2
47½	44	3
48	45	0
48½	45	1

In.	In.	4ths.
49	45	1
49½	45	2
50	45	3
50½	46	0
51	46	1
51½	46	2
52	46	3
52½	47	0
53	47	1
53½	47	2
54	47	2
54½	47	3
55	48	0
55½	48	1
56	48	2
56½	48	3
57	48	3
57½	49	0
58	49	1
58½	49	2
59	49	3
59½	50	0
60	50	0

42½ Inches by

In.	In.	4ths
43	42	3
43½	43	0
44	43	1
44½	43	2
45	43	3
45½	44	0
46	44	1
46½	44	2
47	44	3
47½	45	0
48	45	1
48½	45	2
49	45	2
49½	45	3
50	46	0
50½	46	1
51	46	2
51½	46	3
52	47	0
52½	47	1

In.	In.	4ths.
53	47	2
53½	47	3
54	47	3
54½	48	0
55	48	1
55½	48	2
56	48	3
56½	49	0
57	49	1
57½	49	2
58	49	2
58½	49	3
59	50	0
59½	50	1
60	50	2

43 Inches by

In.	In.	4ths.
43½	43	1
44	43	2
44½	43	3
45	44	0
45½	44	1
46	44	2
46½	44	3
47	45	0
47½	45	1
48	45	2
48½	45	3
49	46	0
49½	46	1
50	46	1
50½	46	2
51	46	3
51½	47	0
52	47	1
52½	47	2
53	47	3
53½	48	0
54	48	0
54½	48	1
55	48	2
55½	48	3
56	49	0
56½	49	1
57	49	2

In.	In.	4ths.
57½	49	3
58	50	0
58½	50	0
59	50	1
59½	50	2
60	50	3

43½ Inches by

In.	In.	4ths.
44	43	3
44½	44	0
45	44	1
45½	44	2
46	44	3
46½	45	0
47	45	1
47½	45	2
48	45	3
48½	46	0
49	46	1
49½	46	2
50	46	3
50½	46	3
51	47	0
51½	47	1
52	47	2
52½	47	3
53	48	0
53½	48	1
54	48	2
54½	48	3
55	49	0
55½	49	0
56	49	1
56½	49	2
57	49	3
57½	50	0
58	50	0
58½	50	1
59	50	2
59½	50	3
60	51	0

44 Inches by

In.	In.	4ths.
44½	44	1
45	44	2
45½	44	3
46	45	0
46½	45	1
47	45	2
47½	45	3
48	46	0
48½	46	1
49	46	2
49½	46	3
50	47	0
50½	47	1
51	47	1
51½	47	2
52	47	3
52½	48	0
53	48	1
53½	48	2
54	48	3
54½	49	0
55	49	1
55½	49	2
56	49	3
56½	49	3
57	50	0
57½	50	1
58	50	2
58½	50	3
59	51	0
59½	51	1
60	51	2

44½ Inches by

In.	In.	4ths.
45	44	3
45½	45	0
46	45	1
46½	45	2
47	45	3
47½	46	0
48	46	1
48½	46	2
49	46	3

In.	In.	4ths.
49½	47	0
50	47	1
50½	47	2
51	47	3
51½	47	3
52	48	0
52½	48	1
53	48	2
53½	48	3
54	49	0
54½	49	1
55	49	2
55½	49	3
56	50	0
56½	50	0
57	50	1
57½	50	2
58	50	3
58½	51	0
59	51	1
59½	51	2
60	51	2

45 Inches by

In.	In.	4ths.
45½	45	1
46	45	2
46½	45	3
47	46	0
47½	46	1
48	46	2
48½	46	3
49	47	0
49½	47	1
50	47	2
50½	47	3
51	48	0
51½	48	1
52	48	1
52½	48	2
53	48	3
53½	49	0
54	49	1
54½	49	2
55	49	3
55½	50	0

In.	In.	4ths.
56	50	1
56½	50	2
57	50	2
57½	50	3
58	51	0
58½	51	1
59	51	2
59½	51	3
60	52	0

45½ Inches by

In.	In.	4ths.
46	45	3
46½	46	0
47	46	1
47½	46	2
48	46	3
48½	47	0
49	47	1
49½	47	2
50	47	3
50½	48	0
51	48	1
51½	48	2
52	48	3
52½	48	3
53	49	0
53½	49	1
54	49	2
54½	49	3
55	50	0
55½	50	1
56	50	2
56½	50	3
57	51	0
57½	51	0
58	51	1
58½	51	2
59	51	3
59½	52	0
60	52	1

46 Inches by

In.	In.	4ths.
46½	46	1

In.	In.	4ths.
47	46	2
47½	46	3
48	47	0
48½	47	1
49	47	2
49½	47	3
50	48	0
50½	48	1
51	48	2
51½	48	3
52	49	0
52½	49	0
53	49	1
53½	49	2
54	49	3
54½	50	0
55	50	1
55½	50	2
56	50	3
56½	51	0
57	51	0
57½	51	1
58	51	2
58½	51	3
59	52	0
59½	52	1
60	52	2

46½ Inches by

In.	In.	4ths.
47	46	3
47½	47	0
48	47	1
48½	47	2
49	47	3
49½	48	0
50	48	1
50½	48	2
51	48	3
51½	49	0
52	49	1
52½	49	2
53	49	3
53½	49	3
54	50	0
54½	50	1

In.	In.	4ths.
55	50	2
55½	50	3
56	51	0
56½	51	1
57	51	2
57½	51	3
58	52	0
58½	52	0
59	52	1
59½	52	2
60	52	3

47 Inches by

In.	In.	4ths.
47½	47	1
48	47	2
48½	47	3
49	48	0
49½	48	1
50	48	2
50½	48	3
51	49	0
51½	49	1
52	49	2
52½	49	3
53	50	0
53½	50	1
54	50	2
54½	50	2
55	50	3
55½	51	0
56	51	1
56½	51	2
57	51	3
57½	52	0
58	52	1
58½	52	2
59	52	3
59½	53	0
60	53	0

47½ Inches by

In.	In.	4ths.
48	47	3
48½	48	0

In.	In.	4ths.
49	48	1
49½	48	2
50	48	3
50½	49	0
51	49	1
51½	49	2
52	49	3
52½	50	0
53	50	1
53½	50	2
54	50	3
54½	50	3
55	51	0
55½	51	1
56	51	2
56½	51	3
57	52	0
57½	52	1
58	52	2
58½	52	3
59	53	0
59½	53	0
60	53	1

48 Inches by

In.	In.	4ths.
48½	48	1
49	48	2
49½	48	3
50	49	0
50½	49	1
51	49	2
51½	49	3
52	50	0
52½	50	1
53	50	2
53½	50	3
54	51	0
54½	51	0
55	51	1
55½	51	2
56	51	3
56½	52	0
57	52	1
57½	52	2
58	52	3

In.	In.	4ths.
58½	53	0
59	53	1
59½	53	2
60	53	3

48½ Inches by

In.	In.	4ths.
49	48	3
49½	49	0
50	49	1
50½	49	2
51	49	3
51½	50	0
52	50	1
52½	50	2
53	50	3
53½	51	0
54	51	0
54½	51	1
55	51	2
55½	51	3
56	52	0
56½	52	1
57	52	2
57½	52	3
58	53	0
58½	53	1
59	53	2
59½	53	3
60	54	0

49 Inches by

In.	In.	4ths.
49½	49	1
50	49	2
50½	49	3
51	50	0
51½	50	1
52	50	2
52½	50	3
53	51	0
53½	51	1
54	51	2
54½	51	2
55	51	3

In.	In.	4ths.
55½	52	0
56	52	1
56½	52	2
57	52	3
57½	53	0
58	53	1
58½	53	2
59	53	3
59½	54	0
60	54	1

In.	In.	4ths.
54½	52	1
55	52	2
55½	52	3
56	53	0
56½	53	0
57	53	1
57½	53	2
58	53	3
58½	54	0
59	54	1
59½	54	2
60	54	3

In.	In.	4ths.
55½	53	1
56	53	2
56½	53	2
57	53	3
57½	54	0
58	54	1
58½	54	2
59	54	3
59½	55	0
60	55	1

In.	In.	4ths.
58½	55	0
59	55	1
59½	55	2
60	55	3

49⅓ Inches by

In.	In.	4ths.
50	49	3
50½	50	0
51	50	1
51½	50	2
52	50	3
52½	51	0
53	51	1
53½	51	2
54	51	3
54½	52	0
55	52	1
55½	52	2
56	52	3
56½	53	0
57	53	0
57½	53	1
58	53	2
58½	53	3
59	54	0
59½	54	1
60	54	2

50⅓ Inches by

In.	In.	4ths.
51	50	3
51½	51	0
52	51	1
52½	51	2
53	51	3
53½	52	0
54	52	1
54½	52	2
55	52	3
55½	53	0
56	53	1
56½	53	2
57	53	3
57½	54	0
58	54	0
58½	54	1
59	54	2
59½	54	3
60	55	0

50 Inches by

In.	In.	4ths.
50½	50	1
51	50	2
51½	50	3
52	51	0
52½	51	1
53	51	2
53½	51	3
54	52	0

51 Inches by

In.	In.	4ths.
51½	51	1
52	51	2
52½	51	3
53	52	0
53½	52	1
54	52	2
54½	52	3
55	53	0

51⅓ Inches by

In.	In.	4ths.
52	51	3
52½	52	0
53	52	1
53½	52	2
54	52	3
54½	53	0
55	53	1
55½	53	2
56	53	3
56½	54	0
57	54	1
57½	54	2
58	54	3
58½	55	0
59	55	0
59½	55	1
60	55	2

52 Inches by

In.	In.	4ths.
52½	52	1
53	52	2
53½	52	3
54	53	0
54½	53	1
55	53	2
55½	53	3
56	54	0
56½	54	1
57	54	2
57½	54	3
58	55	0

52⅓ Inches by

In.	In.	4ths.
53	52	3
53½	53	0
54	53	1
54½	53	2
55	53	3
55½	54	0
56	54	1
56½	54	2
57	54	3
57½	55	0
58	55	1
58½	55	2
59	55	3
59½	56	0
60	56	0

53 Inches by

In.	In.	4ths.
53½	53	1
54	53	2
54½	53	3
55	54	0
55½	54	1
56	54	2
56½	54	3
57	55	0
57½	55	1
58	55	2
58½	55	3
59	56	0
59½	56	1
60	56	2

53⅓ Inches by

In.	In.	4ths.
54	53	3
54½	54	0

In.	In. 4ths.
55	54 1
55½	54 2
56	54 3
56½	55 0
57	55 1
57½	55 2
58	55 3
58½	56 0
59	56 1
59½	56 2
60	56 3

54 Inches by

In.	In. 4ths.
54½	54 1
55	54 2
55½	54 3
56	55 0
56½	55 1
57	55 2
57½	55 3
58	56 0
58½	56 1
59	56 2
59½	56 3
60	57 0

54½ Inches by

In.	In. 4ths.
55	54 3
55½	55 0
56	55 1

In.	In. 4ths.
56½	55 2
57	55 3
57½	56 0
58	56 1
58½	56 2
59	56 3
59½	57 0
60	57 1

55 Inches by

In.	In. 4ths.
55½	55 1
56	55 2
56½	55 3
57	56 0
57½	56 1
58	56 2
58½	56 3
59	57 0
59½	57 1
60	57 2

55½ Inches by

In.	In. 4ths.
56	55 3
56½	56 0
57	56 1
57½	56 2
58	56 3
58½	57 0
59	57 1
59½	57 2

In.	In. 4ths.
60	57 3

56 Inches by

In.	In. 4ths.
56½	56 1
57	56 2
57½	56 3
58	57 0
58½	57 1
59	57 2
59½	57 3
60	58 0

56½ Inches by

In.	In. 4ths.
57	56 3
57½	57 0
58	57 1
58½	57 2
59	57 3
59½	58 0
60	58 1

57 Inches by

In.	In. 4ths.
57½	57 1
58	57 2
58½	57 3
59	58 0
59½	58 1
60	58 2

57½ Inches by

In.	In. 4ths.
58	57 3
58½	58 0
59	58 1
59½	58 2
60	58 3

58 Inches by

In.	In. 4ths.
58½	58 1
59	58 2
59½	58 3
60	59 0

58½ Inches by

In.	In. 4ths.
59	58 3
59½	59 0
60	59 1

59 Inches by

In.	In. 4ths.
59½	59 1
60	59 2

59½ Inches by

In.	In. 4ths.
60	59 3

TABLE III.

SOLID MEASURE.

This Table shows the solid or cubical content or measure of any plank, tree, log, stone, piece of digging, &c. or of any solid of which the side of the square is given, or has been found by Table II.

The side of the square is placed on the top of the page, commencing at $\frac{1}{2}$ inch, and advancing by $\frac{1}{4}$ of an inch to 5 feet, after which rising by 1 foot it proceeds on to 36 feet.

The length is found in the left hand column of the page, commencing with $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$ of a foot, and afterwards progresses, rising by 1 foot to 40 feet, and finishes with 80 feet.

Each page is divided into three parts, and each part into four columns, at the head of each part in their order is placed the side of the square, and on the top of the columns stands *Ft. In. Pts. 2ds.* for Feet, Inches, Parts, and Seconds.

From 6 to 36 feet, the side of the square, the content or measure is given in Yards, Feet, Inches, and Parts, and on the top of the columns under these sides of the square, are placed *Yds. Ft. In. Pts.*

Now suppose it is required to find the content of any solid of which the side of the square is given; look along the tops of the columns until you find the given side of the square, under which, and opposite the given length in the left hand column, is found the content required.

Note. The feet and quarters of a foot, if any, in the length, must be taken out separately and added together; and if the length extends beyond the table, it must also be taken out at two or more times, and the several contents added together. Any length up to 120 feet is found at twice taking out; for example, if lengths of 63, 76, and 114 feet were required, for the first add the contents of 31 and 32, or 40 and 23 together; for the second take twice 38, or 40 and 36; and for the third take 80 and 34, which will give the content at these required lengths.

EXAMPLES.

1. Required the solid content of a tree of which the side of the square is $8\frac{1}{2}$ inches, and the length 16 feet?

Find $8\frac{1}{2}$ inches, the side of the square, on the top of the page, and look down the left hand column for 16 feet, opposite which, and under $8\frac{1}{2}$ inches, stands 8. 0. 4. 0. or 8 feet and 4 parts, the content.

2. Required the solid content of a log 40 feet 6 inches long, and side of the square $23\frac{3}{4}$ inches?

Under $23\frac{3}{4}$ inches, and opposite 40 feet,

stands	156	8	2	6
and opposite 6 inches stands	1	11	6	0
by adding which together gives	158	7	8	6

or 158 feet, 7 inches, 8 parts, and 6 seconds, the content.

3. Required the solid content of a tree, the side of the square of which is $17\frac{1}{2}$ inches, and its length 69 feet?

Find $17\frac{1}{2}$ inches, the side of the square, on the top of the page, and as we cannot get 69 feet in length in the table we must take two numbers to make up that length, which may be 34 and 35, as these may be added together on the table at once without setting them down on paper.

First, then, opposite 34 feet stands	72	3	8	6
and opposite 35 feet is	74	5	2	9
the solid content,	146	8	11	3

Or 40 and 29 might have been taken thus:

Opposite 40 feet stands	85	0	10	0
and opposite 29 feet is	61	8	1	3
which gives the same result	146	8	11	3

or 146 feet, 8 inches, 11 parts, and 3 seconds, the solid content.

4. Required the solid yards of digging in a portion of a

canal 108 feet long, the side of the square of which has been found to be 34 feet?

Find 34 feet, the side of the square, on the top of the page, and as the length is not to be had in the table at once, add the contents at 80 feet and 28 feet together.

Thus opposite 80 feet stands	3425	5
and opposite 28 feet stands	1198	22
which gives	4624	0

or 4624 solid yards, the content.

Note. By addition or multiplication the table may be extended to any required length.

Feet Long.	Side ¼ inch.				Side ⅜ inch.				Side 1 inch.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	0	0¾	0	0	0	1	0	0	0	3
½	0	0	0	1½	0	0	0	3	0	0	0	6
¾	0	0	0	2¼	0	0	0	5	0	0	0	9
1	0	0	0	3	0	0	0	6	0	0	1	0
2	0	0	0	6	0	0	1	1	0	0	2	0
3	0	0	0	9	0	0	1	8	0	0	3	0
4	0	0	1	0	0	0	2	3	0	0	4	0
5	0	0	1	3	0	0	2	9	0	0	5	0
6	0	0	1	6	0	0	3	4	0	0	6	0
7	0	0	1	9	0	0	3	11	0	0	7	0
8	0	0	2	0	0	0	4	6	0	0	8	0
9	0	0	2	3	0	0	5	0	0	0	9	0
10	0	0	2	6	0	0	5	7	0	0	10	0
11	0	0	2	9	0	0	6	2	0	0	11	0
12	0	0	3	0	0	0	6	9	0	1	0	0
13	0	0	3	3	0	0	7	3	0	1	1	0
14	0	0	3	6	0	0	7	10	0	1	2	0
15	0	0	3	9	0	0	8	5	0	1	3	0
16	0	0	4	0	0	0	9	0	0	1	4	0
17	0	0	4	3	0	0	9	6	0	1	5	0
18	0	0	4	6	0	0	10	1	0	1	6	0
19	0	0	4	9	0	0	10	8	0	1	7	0
20	0	0	5	0	0	0	11	3	0	1	8	0
21	0	0	5	3	0	0	11	9	0	1	9	0
22	0	0	5	6	0	1	0	4	0	1	10	0
23	0	0	5	9	0	1	0	11	0	1	11	0
24	0	0	6	0	0	1	1	6	0	2	0	0
25	0	0	6	3	0	1	2	0	0	2	1	0
26	0	0	6	6	0	1	2	7	0	2	2	0
27	0	0	6	9	0	1	3	2	0	2	3	0
28	0	0	7	0	0	1	3	9	0	2	4	0
29	0	0	7	3	0	1	4	3	0	2	5	0
30	0	0	7	6	0	1	4	10	0	2	6	0
31	0	0	7	9	0	1	5	5	0	2	7	0
32	0	0	8	0	0	1	6	0	0	2	8	0
33	0	0	8	3	0	1	6	6	0	2	9	0
34	0	0	8	6	0	1	7	1	0	2	10	0
35	0	0	8	9	0	1	7	8	0	2	11	0
36	0	0	9	0	0	1	8	3	0	3	0	0
37	0	0	9	3	0	1	8	9	0	3	1	0
38	0	0	9	6	0	1	9	4	0	3	2	0
39	0	0	9	9	0	1	9	11	0	3	3	0
40	0	0	10	0	0	1	10	6	0	3	4	0
80	0	1	8	0	0	3	9	0	0	6	8	0

Feet Long.	Side 1½ inch.				Side 1⅝ inch.				Side 1¾ inch.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	0	4	0	0	0	6	0	0	0	9
½	0	0	0	9	0	0	1	1	0	0	1	6
¾	0	0	1	2	0	0	1	8	0	0	2	3
1	0	0	1	6	0	0	2	3	0	0	3	0
2	0	0	3	1	0	0	4	6	0	0	6	1
3	0	0	4	8	0	0	6	9	0	0	9	2
4	0	0	6	3	0	0	9	0	0	1	0	3
5	0	0	7	9	0	0	11	3	0	1	3	3
6	0	0	9	4	0	1	1	6	0	1	6	4
7	0	0	10	11	0	1	3	9	0	1	9	5
8	0	1	0	6	0	1	6	0	0	2	0	6
9	0	1	2	0	0	1	8	3	0	2	3	6
10	0	1	3	7	0	1	10	6	0	2	6	7
11	0	1	5	2	0	2	0	9	0	2	9	8
12	0	1	6	9	0	2	3	0	0	3	0	9
13	0	1	8	3	0	2	5	3	0	3	3	9
14	0	1	9	10	0	2	7	6	0	3	6	10
15	0	1	11	5	0	2	9	9	0	3	9	11
16	0	2	1	0	0	3	0	0	0	4	1	0
17	0	2	2	6	0	3	2	3	0	4	4	0
18	0	2	4	1	0	3	4	6	0	4	7	1
19	0	2	5	8	0	3	6	9	0	4	10	2
20	0	2	7	3	0	3	9	0	0	5	1	3
21	0	2	8	9	0	3	11	3	0	5	4	3
22	0	2	10	4	0	4	1	6	0	5	7	4
23	0	2	11	11	0	4	3	9	0	5	10	5
24	0	3	1	6	0	4	6	0	0	6	1	6
25	0	3	3	0	0	4	8	3	0	6	4	6
26	0	3	4	7	0	4	10	6	0	6	7	7
27	0	3	6	2	0	5	0	9	0	6	10	8
28	0	3	7	9	0	5	3	0	0	7	1	9
29	0	3	9	3	0	5	5	3	0	7	4	9
30	0	3	10	10	0	5	7	6	0	7	7	10
31	0	4	0	5	0	5	9	9	0	7	10	11
32	0	4	2	0	0	6	0	0	0	8	2	0
33	0	4	3	6	0	6	2	3	0	8	5	0
34	0	4	5	1	0	6	4	6	0	8	8	1
35	0	4	6	8	0	6	6	9	0	8	11	2
36	0	4	8	3	0	6	9	0	0	9	2	3
37	0	4	9	9	0	6	11	3	0	9	5	3
38	0	4	11	4	0	7	1	6	0	9	8	4
39	0	5	0	11	0	7	3	9	0	9	11	5
40	0	5	2	6	0	7	6	0	0	10	2	6
80	0	10	5	0	1	3	0	0	1	8	5	0

Feet Long.	Side 2 In.				Side 2¼ In				Side 2½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	1	0	0	0	1	3	0	0	1	6
½	0	0	2	0	0	0	2	6	0	0	3	6
¾	0	0	3	0	0	0	3	9	0	0	4	8
1	0	0	4	0	0	0	5	0	0	0	6	3
2	0	0	8	0	0	0	10	1	0	1	0	6
3	0	1	0	0	0	1	3	2	0	1	6	9
4	0	1	4	0	0	1	8	3	0	2	1	0
5	0	1	8	0	0	2	1	3	0	2	7	3
6	0	2	0	0	0	2	6	4	0	3	1	6
7	0	2	4	0	0	2	11	5	0	3	7	9
8	0	2	8	0	0	3	4	6	0	4	2	0
9	0	3	0	0	0	3	9	6	0	4	8	3
10	0	3	4	0	0	4	2	7	0	5	2	6
11	0	3	8	0	0	4	7	8	0	5	8	9
12	0	4	0	0	0	5	0	9	0	6	3	0
13	0	4	4	0	0	5	5	9	0	6	9	3
14	0	4	8	0	0	5	10	10	0	7	3	6
15	0	5	0	0	0	6	3	11	0	7	9	9
16	0	5	4	0	0	6	9	0	0	8	4	0
17	0	5	8	0	0	7	2	0	0	8	10	3
18	0	6	0	0	0	7	7	1	0	9	4	6
19	0	6	4	0	0	8	0	2	0	9	10	9
20	0	6	8	0	0	8	5	3	0	10	5	0
21	0	7	0	0	0	8	10	3	0	10	11	3
22	0	7	4	0	0	9	3	4	0	11	5	6
23	0	7	8	0	0	9	8	5	0	11	11	9
24	0	8	0	0	0	10	1	6	1	0	6	0
25	0	8	4	0	0	10	6	6	1	1	0	3
26	0	8	8	0	0	10	11	7	1	1	6	6
27	0	9	0	0	0	11	4	8	1	2	0	9
28	0	9	4	0	0	11	9	9	1	2	7	0
29	0	9	8	0	1	0	2	9	1	3	1	3
30	0	10	0	0	1	0	7	10	1	3	7	6
31	0	10	4	0	1	1	0	11	1	4	1	9
32	0	10	8	0	1	1	6	0	1	4	8	0
33	0	11	0	0	1	1	11	0	1	5	2	3
34	0	11	4	0	1	2	4	1	1	5	8	6
35	0	11	8	0	1	2	9	2	1	6	2	9
36	1	0	0	0	1	3	2	3	1	6	9	0
37	1	0	4	0	1	3	7	3	1	7	3	3
38	1	0	8	0	1	4	0	4	1	7	9	6
39	1	1	0	0	1	4	5	5	1	8	3	9
40	1	1	4	0	1	4	10	6	1	8	10	0
80	2	2	8	0	2	9	9	0	3	5	8	0

Feet Long.	Side 2¾ In.				Side 3 In.				Side 3¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	1	10	0	0	2	3	0	0	2	7
½	0	0	3	9	0	0	4	6	0	0	5	3
¾	0	0	5	8	0	0	6	9	0	0	7	10
1	0	0	7	6	0	0	9	0	0	0	10	6
2	0	1	3	1	0	1	6	0	0	1	9	1
3	0	1	10	8	0	2	3	0	0	2	7	8
4	0	2	6	3	0	3	0	0	0	3	6	3
5	0	3	1	9	0	3	9	0	0	4	4	9
6	0	3	9	4	0	4	6	0	0	5	3	4
7	0	4	4	11	0	5	3	0	0	6	1	11
8	0	5	0	6	0	6	0	0	0	7	0	6
9	0	5	8	0	0	6	9	0	0	7	11	0
10	0	6	3	7	0	7	6	0	0	8	9	7
11	0	6	11	2	0	8	3	0	0	9	8	2
12	0	7	6	9	0	9	0	0	0	10	6	9
13	0	8	2	3	0	9	9	0	0	11	5	3
14	0	8	9	10	0	10	6	0	1	0	3	10
15	0	9	5	5	0	11	3	0	1	1	2	5
16	0	10	1	0	1	0	0	0	1	2	1	0
17	0	10	8	6	1	0	9	0	1	2	11	6
18	0	11	4	1	1	1	6	0	1	3	10	1
19	0	11	11	8	1	2	3	0	1	4	8	8
20	1	0	7	3	1	3	0	0	1	5	7	3
21	1	1	2	9	1	3	9	0	1	6	5	9
22	1	1	10	4	1	4	6	0	1	7	4	4
23	1	2	5	11	1	5	3	0	1	8	2	11
24	1	3	1	6	1	6	0	0	1	9	1	6
25	1	3	9	0	1	6	9	0	1	10	0	0
26	1	4	4	7	1	7	6	0	1	10	10	7
27	1	5	0	1	1	8	3	0	1	11	9	2
28	1	5	7	8	1	9	0	0	2	0	7	9
29	1	6	3	3	1	9	9	0	2	1	6	3
30	1	6	10	10	1	10	6	0	2	2	4	10
31	1	7	6	5	1	11	3	0	2	3	3	5
32	1	8	2	0	2	0	0	0	2	4	2	0
33	1	8	9	6	2	0	9	0	2	5	0	6
34	1	9	5	1	2	1	6	0	2	5	11	1
35	1	10	0	8	2	2	3	0	2	6	9	8
36	1	10	8	3	2	3	0	0	2	7	8	3
37	1	11	3	9	2	3	9	0	2	8	6	9
38	1	11	11	4	2	4	6	0	2	9	5	4
39	2	0	6	11	2	5	3	0	2	10	3	11
40	2	1	2	6	2	6	0	0	2	11	2	6
80	4	2	5	0	5	0	0	0	5	10	5	0

Feet Long.	Side $3\frac{1}{3}$ In.				Side $3\frac{3}{4}$ In.				Side 4 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
$\frac{1}{4}$	0	0	3	0	0	0	3	6	0	0	4	0
$\frac{1}{2}$	0	0	6	1	0	0	7	0	0	0	8	0
$\frac{3}{4}$	0	0	9	2	0	0	10	6	0	1	0	0
1	0	1	0	3	0	1	2	0	0	1	4	0
2	0	2	0	6	0	2	4	1	0	2	8	0
3	0	3	0	9	0	3	6	2	0	4	0	0
4	0	4	1	0	0	4	8	3	0	5	4	0
5	0	5	1	3	0	5	10	3	0	6	8	0
6	0	6	1	6	0	7	0	4	0	8	0	0
7	0	7	1	9	0	8	2	5	0	9	4	0
8	0	8	2	0	0	9	4	6	0	10	8	0
9	0	9	2	3	0	10	6	6	1	0	0	0
10	0	10	2	6	0	11	8	7	1	1	4	0
11	0	11	2	9	1	0	10	8	1	2	8	0
12	1	0	3	0	1	2	0	9	1	4	0	0
13	1	1	3	3	1	3	2	10	1	5	4	0
14	1	2	3	6	1	4	4	10	1	6	8	0
15	1	3	3	9	1	5	6	11	1	8	0	0
16	1	4	4	0	1	6	9	0	1	9	4	0
17	1	5	4	3	1	7	11	0	1	10	8	0
18	1	6	4	6	1	9	1	1	2	0	0	0
19	1	7	4	9	1	10	3	2	2	1	4	0
20	1	8	5	0	1	11	5	3	2	2	8	0
21	1	9	5	3	2	0	7	3	2	4	0	0
22	1	10	5	6	2	1	9	4	2	5	4	0
23	1	11	5	9	2	2	11	5	2	6	8	0
24	2	0	6	0	2	4	1	6	2	8	0	0
25	2	1	6	3	2	5	3	6	2	9	4	0
26	2	2	6	6	2	6	5	7	2	10	8	0
27	2	3	6	9	2	7	7	8	3	0	0	0
28	2	4	7	0	2	8	9	8	3	1	4	0
29	2	5	7	3	2	9	11	9	3	2	8	0
30	2	6	7	6	2	11	1	10	3	4	0	0
31	2	7	7	9	3	0	3	11	3	5	4	0
32	2	8	8	0	3	1	6	0	3	6	8	0
33	2	9	8	3	3	2	8	0	3	8	0	0
34	2	10	8	6	3	3	10	1	3	9	4	0
35	2	11	8	9	3	5	0	2	3	10	8	0
36	3	0	9	0	3	6	2	3	4	0	0	0
37	3	1	9	3	3	7	4	3	4	1	4	0
38	3	2	9	6	3	8	6	4	4	2	8	0
39	3	3	9	9	3	9	8	5	4	4	0	0
40	3	4	10	0	3	10	10	6	4	5	4	0
80	6	9	8	0	7	9	9	0	8	10	8	0

Feet Long.	Side 4¼ In.				Side 4½ In.				Side 4¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	4	6	0	0	5	0	0	0	5	7
½	0	0	9	0	0	0	10	1	0	0	11	3
¾	0	1	1	6	0	1	3	2	0	1	4	11
1	0	1	6	0	0	1	8	3	0	1	10	6
2	0	3	0	1	0	3	4	6	0	3	9	1
3	0	4	6	2	0	5	0	9	0	5	7	8
4	0	6	0	3	0	6	9	0	0	7	6	3
5	0	7	6	3	0	8	5	3	0	9	4	9
6	0	9	0	4	0	10	1	6	0	11	3	4
7	0	10	6	5	0	11	9	9	1	1	1	11
8	1	0	0	6	1	1	6	0	1	3	0	6
9	1	1	6	6	1	3	2	3	1	4	11	0
10	1	3	0	7	1	4	10	6	1	6	9	7
11	1	4	6	8	1	6	6	9	1	8	8	2
12	1	6	0	9	1	8	3	0	1	10	6	9
13	1	7	6	9	1	9	11	3	2	0	5	3
14	1	9	0	10	1	11	7	6	2	2	3	10
15	1	10	6	11	2	1	3	9	2	4	2	5
16	2	0	1	0	2	3	0	0	2	6	1	0
17	2	1	7	0	2	4	8	3	2	7	11	6
18	2	3	1	1	2	6	4	6	2	9	10	1
19	2	4	7	2	2	8	0	9	2	11	8	8
20	2	6	1	3	2	9	9	0	3	1	7	3
21	2	7	7	3	2	11	5	3	3	3	5	9
22	2	9	1	4	3	1	1	6	3	5	4	4
23	2	10	7	5	3	2	9	9	3	7	2	11
24	3	0	1	6	3	4	6	0	3	9	1	6
25	3	1	7	6	3	6	2	3	3	11	0	0
26	3	3	1	7	3	7	10	6	4	0	10	7
27	3	4	7	8	3	9	6	9	4	2	9	2
28	3	6	1	9	3	11	3	0	4	4	7	9
29	3	7	7	9	4	0	11	3	4	6	6	3
30	3	9	1	10	4	2	7	6	4	8	4	10
31	3	10	7	11	4	4	3	9	4	10	3	5
32	4	0	2	0	4	6	0	0	5	0	2	0
33	4	1	8	0	4	7	8	3	5	2	0	6
34	4	3	2	1	4	9	4	6	5	3	11	1
35	4	4	8	2	4	11	0	9	5	5	9	8
36	4	6	2	3	5	0	9	0	5	7	8	3
37	4	7	8	3	5	2	5	3	5	9	6	9
38	4	9	2	4	5	4	1	6	5	11	5	4
39	4	10	8	5	5	5	9	9	6	1	3	11
40	5	0	2	6	5	7	6	0	6	3	2	6
80	10	0	5	0	11	3	0	0	12	6	5	0

Feet Long.	Side 5 In.				Side 5¼ In.				Side 5½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	6	3	0	0	6	10	0	0	7	6
½	0	1	0	6	0	1	1	9	0	1	3	1
¾	0	1	6	9	0	1	8	8	0	1	10	8
1	0	2	1	0	0	2	3	6	0	2	6	3
2	0	4	2	0	0	4	7	1	0	5	0	6
3	0	6	3	0	0	6	10	8	0	7	6	9
4	0	8	4	0	0	9	2	3	0	10	1	0
5	0	10	5	0	0	11	5	9	1	0	7	3
6	1	0	6	0	1	1	9	4	1	3	1	6
7	1	2	7	0	1	4	0	11	1	5	7	9
8	1	4	8	0	1	6	4	6	1	8	2	0
9	1	6	9	0	1	8	8	0	1	10	8	3
10	1	8	10	0	1	10	11	7	2	1	2	6
11	1	10	11	0	2	1	3	2	2	3	8	9
12	2	1	0	0	2	3	6	9	2	6	3	0
13	2	3	1	0	2	5	10	3	2	8	9	3
14	2	5	2	0	2	8	1	10	2	11	3	6
15	2	7	3	0	2	10	5	5	3	1	9	9
16	2	9	4	0	3	0	9	0	3	4	4	0
17	2	11	5	0	3	3	0	6	3	6	10	3
18	3	1	6	0	3	5	4	1	3	9	4	6
19	3	3	7	0	3	7	7	8	3	11	10	9
20	3	5	8	0	3	9	11	3	4	2	5	0
21	3	7	9	0	4	0	2	9	4	4	11	3
22	3	9	10	0	4	2	6	4	4	7	5	6
23	3	11	11	0	4	4	9	11	4	9	11	9
24	4	2	0	0	4	7	1	6	5	0	6	0
25	4	4	1	0	4	9	5	0	5	3	0	3
26	4	6	2	0	4	11	8	7	5	5	6	6
27	4	8	3	0	5	2	0	2	5	8	0	9
28	4	10	4	0	5	4	3	9	5	10	7	0
29	5	0	5	0	5	6	7	3	6	1	1	3
30	5	2	6	0	5	8	10	10	6	3	7	6
31	5	4	7	0	5	11	2	5	6	6	1	9
32	5	6	8	0	6	1	6	0	6	8	8	0
33	5	8	9	0	6	3	9	6	6	11	2	3
34	5	10	10	0	6	6	1	1	7	1	8	6
35	6	0	11	0	6	8	4	8	7	4	2	9
36	6	3	0	0	6	10	8	3	7	6	9	0
37	6	5	1	0	7	0	11	9	7	9	3	3
38	6	7	2	0	7	3	3	4	7	11	9	6
39	6	9	3	0	7	5	6	11	8	2	3	9
40	6	11	4	0	7	7	0	6	8	4	10	0
80	13	10	8	0	15	3	9	0	16	9	8	0

Feet Long.	Side 5¾ In.				Side 6 In.				Side 6¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	8	3	0	0	9	0	0	0	9	9
½	0	1	4	6	0	1	6	0	0	1	7	6
¾	0	2	0	9	0	2	3	0	0	2	5	3
1	0	2	9	0	0	3	0	0	0	3	3	0
2	0	5	6	1	0	6	0	0	0	6	6	1
3	0	8	3	2	0	9	0	0	0	9	9	2
4	0	11	0	3	1	0	0	0	1	1	0	3
5	1	1	9	3	1	3	0	0	1	4	3	3
6	1	4	6	4	1	6	0	0	1	7	6	4
7	1	7	3	5	1	9	0	0	1	10	9	5
8	1	10	0	6	2	0	0	0	2	2	0	6
9	2	0	9	6	2	3	0	0	2	5	3	6
10	2	3	6	7	2	6	0	0	2	8	6	7
11	2	6	3	8	2	9	0	0	2	11	9	8
12	2	9	0	9	3	0	0	0	3	3	0	9
13	2	11	9	9	3	3	0	0	3	6	3	9
14	3	2	6	10	3	6	0	0	3	9	6	10
15	3	5	3	11	3	9	0	0	4	0	9	11
16	3	8	1	0	4	0	0	0	4	4	1	0
17	3	10	10	0	4	3	0	0	4	7	4	0
18	4	1	7	1	4	6	0	0	4	10	7	1
19	4	4	4	2	4	9	0	0	5	1	10	2
20	4	7	1	3	5	0	0	0	5	5	1	3
21	4	9	10	3	5	3	0	0	5	8	4	3
22	5	0	7	4	5	6	0	0	5	11	7	4
23	5	3	4	5	5	9	0	0	6	2	10	5
24	5	6	1	6	6	0	0	0	6	6	1	6
25	5	8	10	6	6	3	0	0	6	9	4	6
26	5	11	7	7	6	6	0	0	7	0	7	7
27	6	2	4	8	6	9	0	0	7	3	10	8
28	6	5	1	9	7	0	0	0	7	7	1	9
29	6	7	10	9	7	3	0	0	7	10	4	9
30	6	10	7	10	7	6	0	0	8	1	7	10
31	7	1	4	11	7	9	0	0	8	4	10	11
32	7	4	2	0	8	0	0	0	8	8	2	0
33	7	6	11	0	8	3	0	0	8	11	5	0
34	7	9	8	1	8	6	0	0	9	2	8	1
35	8	0	5	2	8	9	0	0	9	5	11	2
36	8	3	2	3	9	0	0	0	9	9	2	3
37	8	5	11	3	9	3	0	0	10	0	5	3
38	8	8	8	4	9	6	0	0	10	3	8	4
39	8	11	5	5	9	9	0	0	10	6	11	5
40	9	2	2	6	10	0	0	0	10	10	2	6
80	18	4	5	0	20	0	0	0	21	8	5	0

Feet Long.	Side 6½ In.				Side 6¾ In.				Side 7 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	0	10	6	0	0	11	4	0	1	0	3
½	0	1	9	1	0	1	10	9	0	2	0	6
¾	0	2	7	8	0	2	10	2	0	3	0	9
1	0	3	6	3	0	3	9	6	0	4	1	0
2	0	7	0	6	0	7	7	1	0	8	2	0
3	0	10	6	9	0	11	4	8	1	0	3	0
4	1	2	1	0	1	3	2	3	1	4	4	0
5	1	5	7	3	1	6	11	9	1	8	5	0
6	1	9	1	6	1	10	9	4	2	0	6	0
7	2	0	7	9	2	2	6	11	2	4	7	0
8	2	4	2	0	2	6	4	6	2	8	8	0
9	2	7	8	3	2	10	2	0	3	0	9	0
10	2	11	2	6	3	1	11	7	3	4	10	0
11	3	2	8	9	3	5	9	2	3	8	11	0
12	3	6	3	0	3	9	6	9	4	1	0	0
13	3	9	9	3	4	1	4	3	4	5	1	0
14	4	1	3	6	4	5	1	10	4	9	2	0
15	4	4	9	9	4	8	11	5	5	1	3	0
16	4	8	4	0	5	0	9	0	5	5	4	0
17	4	11	10	3	5	4	6	6	5	9	5	0
18	5	3	4	6	5	8	4	1	6	1	6	0
19	5	6	10	9	6	0	1	8	6	5	7	0
20	5	10	5	0	6	3	11	3	6	9	8	0
21	6	1	11	3	6	7	8	9	7	1	9	0
22	6	5	5	6	6	11	6	4	7	5	10	0
23	6	8	11	9	7	3	3	11	7	9	11	0
24	7	0	6	0	7	7	1	6	8	2	0	0
25	7	4	0	3	7	10	11	0	8	6	1	0
26	7	7	6	6	8	2	8	7	8	10	2	0
27	7	11	0	9	8	6	6	2	9	2	3	0
28	8	2	7	0	8	10	3	9	9	6	4	0
29	8	6	1	3	9	2	1	3	9	10	5	0
30	8	9	7	6	9	5	10	10	10	2	6	0
31	9	1	1	9	9	9	8	5	10	6	7	0
32	9	4	8	0	10	1	6	0	10	10	8	0
33	9	8	2	3	10	5	3	6	11	2	9	0
34	9	11	8	6	10	9	1	1	11	6	10	0
35	10	3	2	9	11	0	10	8	11	10	11	0
36	10	6	9	0	11	4	8	3	12	3	0	0
37	10	10	3	3	11	8	5	9	12	7	1	0
38	11	1	9	6	12	0	3	4	12	11	2	0
39	11	5	3	9	12	4	0	11	13	3	3	0
40	11	8	10	0	12	7	10	6	13	7	4	0
80	23	5	8	0	25	3	9	0	27	2	8	0

Feet Long.	Side 7½ In.				Side 7⅝ In.				Side 7¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	1	1	1	0	1	2	0	0	1	3	0
½	0	2	2	3	0	2	4	1	0	2	6	0
¾	0	3	3	5	0	3	6	2	0	3	9	0
1	0	4	4	6	0	4	8	3	0	5	0	0
2	0	8	9	1	0	9	4	6	0	10	0	1
3	1	1	1	8	1	2	0	9	1	3	0	2
4	1	5	6	3	1	6	9	0	1	8	0	3
5	1	9	10	9	1	11	5	3	2	1	0	3
6	2	2	3	4	2	4	1	6	2	6	0	4
7	2	6	7	11	2	8	9	9	2	11	0	5
8	2	11	0	6	3	1	6	0	3	4	0	6
9	3	3	5	0	3	6	2	3	3	9	0	6
10	3	7	9	7	3	10	10	6	4	2	0	7
11	4	0	2	2	4	3	6	9	4	7	0	8
12	4	4	6	9	4	8	3	0	5	0	0	9
13	4	8	11	3	5	0	11	3	5	5	0	9
14	5	1	3	10	5	5	7	6	5	10	0	10
15	5	5	8	5	5	10	3	9	6	3	0	11
16	5	10	1	0	6	3	0	0	6	8	1	0
17	6	2	5	6	6	7	8	3	7	1	1	0
18	6	6	10	1	7	0	4	6	7	6	1	1
19	6	11	2	8	7	5	0	9	7	11	1	2
20	7	3	7	3	7	9	9	0	8	4	1	3
21	7	7	11	9	8	2	5	3	8	9	1	3
22	8	0	4	4	8	7	1	6	9	2	1	4
23	8	4	8	11	8	11	9	9	9	7	1	5
24	8	9	1	6	9	4	6	0	10	0	1	6
25	9	1	6	0	9	9	2	3	10	5	1	6
26	9	5	10	7	10	1	10	6	10	10	1	7
27	9	10	3	2	10	6	6	9	11	3	1	8
28	10	2	7	9	10	11	3	0	11	8	1	9
29	10	7	0	3	11	3	11	3	12	1	1	9
30	10	11	4	10	11	8	7	6	12	6	1	10
31	11	3	9	5	12	1	3	9	12	11	1	11
32	11	8	2	0	12	6	0	0	13	4	2	0
33	12	0	6	6	12	10	8	3	13	9	2	0
34	12	4	11	1	13	3	4	6	14	2	2	1
35	12	9	3	8	13	8	0	9	14	7	2	2
36	13	1	8	3	14	0	9	0	15	0	2	3
37	13	6	0	9	14	5	5	3	15	5	2	3
38	13	10	5	4	14	10	1	6	15	10	2	4
39	14	2	9	11	15	2	9	9	16	3	2	5
40	14	7	2	6	15	7	6	0	16	8	2	6
80	29	2	5	0	31	3	0	0	33	4	5	0

Feet Long.	Side 8 In.				Side 8¼ In.				Side 8½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	1	4	0	0	1	5	0	0	1	6	0
½	0	2	8	0	0	2	10	0	0	3	0	1
¾	0	4	0	0	0	4	3	0	0	4	6	2
1	0	5	4	0	0	5	8	0	0	6	0	3
2	0	10	8	0	0	11	4	1	1	0	0	6
3	1	4	0	0	1	5	0	2	1	6	0	9
4	1	9	4	0	1	10	8	3	2	0	1	0
5	2	2	8	0	2	4	4	3	2	6	1	3
6	2	8	0	0	2	10	0	4	3	0	1	6
7	3	1	4	0	3	3	8	5	3	6	1	9
8	3	6	8	0	3	9	4	6	4	0	2	0
9	4	0	0	0	4	3	0	6	4	6	2	3
10	4	5	4	0	4	8	8	7	5	0	2	6
11	4	10	8	0	5	2	4	8	5	6	2	9
12	5	4	0	0	5	8	0	9	6	0	3	0
13	5	9	4	0	6	1	8	9	6	6	3	3
14	6	2	8	0	6	7	4	10	7	0	3	6
15	6	8	0	0	7	1	0	11	7	6	3	9
16	7	1	4	0	7	6	9	0	8	0	4	0
17	7	6	8	0	8	0	5	0	8	6	4	3
18	8	0	0	0	8	6	1	1	9	0	4	6
19	8	5	4	0	8	11	9	2	9	6	4	9
20	8	10	8	0	9	5	5	3	10	0	5	0
21	9	4	0	0	9	11	1	3	10	6	5	3
22	9	9	4	0	10	4	9	4	11	0	5	6
23	10	2	8	0	10	10	5	5	11	6	5	9
24	10	8	0	0	11	4	1	6	12	0	6	0
25	11	1	4	0	11	9	9	6	12	6	6	3
26	11	6	8	0	12	3	5	7	13	0	6	6
27	12	0	0	0	12	9	1	8	13	6	6	9
28	12	5	4	0	13	2	9	9	14	0	7	0
29	12	10	8	0	13	8	5	9	14	6	7	3
30	13	4	0	0	14	2	1	10	15	0	7	6
31	13	9	4	0	14	7	9	11	15	6	7	9
32	14	2	8	0	15	1	6	0	16	0	8	0
33	14	8	0	0	15	7	2	0	16	6	8	3
34	15	1	4	0	16	0	10	1	17	0	8	6
35	15	6	8	0	16	6	6	2	17	6	8	9
36	16	0	0	0	17	0	2	3	18	0	9	0
37	16	5	4	0	17	5	10	3	18	6	9	3
38	16	10	8	0	17	11	6	4	19	0	9	6
39	17	4	0	0	18	5	2	5	19	6	9	9
40	17	9	4	0	18	10	10	6	20	0	10	0
80	35	6	8	0	37	9	9	0	40	1	8	0

Feet Long	Side 8¾ In.				Side 9 In.				Side 9¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	1	7	1	0	1	8	3	0	1	9	4
½	0	3	2	3	0	3	4	6	0	3	6	9
¾	0	4	9	5	0	5	0	9	0	5	4	2
1	0	6	4	6	0	6	9	0	0	7	1	6
2	1	0	9	1	1	1	6	0	1	2	3	1
3	1	7	1	8	1	8	3	0	1	9	4	8
4	2	1	6	3	2	3	0	0	2	4	6	3
5	2	7	10	9	2	9	9	0	2	11	7	9
6	3	2	3	4	3	4	6	0	3	6	9	4
7	3	8	7	11	3	11	3	0	4	1	10	11
8	4	3	0	6	4	6	0	0	4	9	0	6
9	4	9	5	0	5	0	9	0	5	4	2	0
10	5	3	9	7	5	7	6	0	5	11	3	7
11	5	10	2	2	6	2	3	0	6	6	5	2
12	6	4	6	9	6	9	0	0	7	1	6	9
13	6	10	11	3	7	3	9	0	7	8	8	3
14	7	5	3	10	7	10	6	0	8	3	9	10
15	7	11	8	5	8	5	3	0	8	10	11	5
16	8	6	1	0	9	0	0	0	9	6	1	0
17	9	0	5	6	9	6	9	0	10	1	2	6
18	9	6	10	1	10	1	6	0	10	8	4	1
19	10	1	2	8	10	8	3	0	11	3	5	8
20	10	7	7	3	11	3	0	0	11	10	7	3
21	11	1	11	9	11	9	9	0	12	5	8	9
22	11	8	4	4	12	4	6	0	13	0	10	4
23	12	2	8	11	12	11	3	0	13	7	11	11
24	12	9	1	6	13	6	0	0	14	3	1	6
25	13	3	6	0	14	0	9	0	14	10	3	0
26	13	9	10	7	14	7	6	0	15	5	4	7
27	14	4	3	2	15	2	3	0	16	0	6	2
28	14	10	7	9	15	9	0	0	16	7	7	9
29	15	5	0	3	16	3	9	0	17	2	9	3
30	15	11	4	10	16	10	6	0	17	9	10	10
31	16	5	9	5	17	5	3	0	18	5	0	5
32	17	0	2	0	18	0	0	0	19	0	2	0
33	17	6	6	6	18	6	9	0	19	7	3	6
34	18	0	11	1	19	1	6	0	20	2	5	1
35	18	7	3	8	19	8	3	0	20	9	6	8
36	19	1	8	3	20	3	0	0	21	4	8	3
37	19	8	0	9	20	9	9	0	21	11	9	9
38	20	2	5	4	21	4	6	0	22	6	11	4
39	20	8	9	11	21	11	3	0	23	2	0	11
40	21	3	2	6	22	6	0	0	23	9	2	6
80	42	6	5	0	45	0	0	0	47	6	5	0

Feet Long.	Side 9½ In.				Side 9¾ In.				Side 10 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	1	10	6	0	1	11	9	0	2	1	0
½	0	3	9	1	0	3	11	6	0	4	2	0
¾	0	5	7	8	0	5	11	3	0	6	3	0
1	0	7	6	3	0	7	11	0	0	8	4	0
2	1	3	0	6	1	3	10	1	1	4	8	0
3	1	10	6	9	1	11	9	2	2	1	0	0
4	2	6	1	0	2	7	8	3	2	9	4	0
5	3	1	7	3	3	3	7	3	3	5	8	0
6	3	9	1	6	3	11	6	4	4	2	0	0
7	4	4	7	9	4	7	5	5	4	10	4	0
8	5	0	2	0	5	3	4	6	5	6	8	0
9	5	7	8	3	5	11	3	6	6	3	0	0
10	6	3	2	6	6	7	2	7	6	11	4	0
11	6	10	8	9	7	3	1	8	7	7	8	0
12	7	6	3	0	7	11	0	9	8	4	0	0
13	8	1	9	3	8	6	11	9	9	0	4	0
14	8	9	3	6	9	2	10	10	9	8	8	0
15	9	4	9	9	9	10	9	11	10	5	0	0
16	10	0	4	0	10	6	9	0	11	1	4	0
17	10	7	10	3	11	2	8	0	11	9	8	0
18	11	3	4	6	11	10	7	1	12	6	0	0
19	11	10	10	9	12	6	6	2	13	2	4	0
20	12	6	5	0	13	2	5	3	13	10	8	0
21	13	1	11	3	13	10	4	3	14	7	0	0
22	13	9	5	6	14	6	3	4	15	3	4	0
23	14	4	11	9	15	2	2	5	15	11	8	0
24	15	0	6	0	15	10	1	6	16	8	0	0
25	15	8	0	3	16	6	0	6	17	4	4	0
26	16	3	6	6	17	1	11	7	18	0	8	0
27	16	11	0	9	17	9	10	8	18	9	0	0
28	17	6	7	0	18	5	9	9	19	5	4	0
29	18	2	1	3	19	1	8	9	20	1	8	0
30	18	9	7	6	19	9	7	10	20	10	0	0
31	19	5	1	9	20	5	6	11	21	6	4	0
32	20	0	8	0	21	1	6	0	22	2	8	0
33	20	8	2	3	21	9	5	0	22	11	0	0
34	21	3	8	6	22	5	4	1	23	7	4	0
35	21	11	2	9	23	1	3	2	24	3	8	0
36	22	6	9	0	23	9	2	3	25	0	0	0
37	23	2	3	3	24	5	1	3	25	8	4	0
38	23	9	9	6	25	1	0	4	26	4	8	0
39	24	5	3	9	25	8	11	5	27	1	0	0
40	25	0	10	0	26	4	10	6	27	9	4	0
80	50	1	8	0	52	9	9	0	55	6	8	0

Feet Long.	Side 10¼ In.				Side 10½ In.				Side 10¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	2	2	3	0	2	3	6	0	2	4	10
½	0	4	4	6	0	4	7	1	0	4	9	9
¾	0	6	6	9	0	6	10	8	0	7	2	8
1	0	8	9	0	0	9	2	3	0	9	7	6
2	1	5	6	1	1	6	4	6	1	7	3	1
3	2	2	3	2	2	3	6	9	2	4	10	8
4	2	11	0	3	3	0	9	0	3	2	6	3
5	3	7	9	3	3	9	11	3	4	0	1	9
6	4	4	6	4	4	7	1	6	4	9	9	4
7	5	1	3	5	5	4	3	9	5	7	4	11
8	5	10	0	6	6	1	6	0	6	5	0	6
9	6	6	9	6	6	10	8	3	7	2	8	0
10	7	3	6	7	7	7	10	6	8	0	3	7
11	8	0	3	8	8	5	0	9	8	9	11	2
12	8	9	0	9	9	2	3	0	9	7	6	9
13	9	5	9	9	9	11	5	3	10	5	2	3
14	10	2	6	10	10	8	7	6	11	2	9	10
15	10	11	3	11	11	5	9	9	12	0	5	5
16	11	8	1	0	12	3	0	0	12	10	1	0
17	12	4	10	0	13	0	2	3	13	7	8	6
18	13	1	7	1	13	9	4	6	14	5	4	1
19	13	10	4	2	14	6	6	9	15	2	11	8
20	14	7	1	3	15	3	9	0	16	0	7	3
21	15	3	10	3	16	0	11	3	16	10	2	9
22	16	0	7	4	16	10	1	6	17	7	10	4
23	16	9	4	5	17	7	3	9	18	5	5	11
24	17	6	1	6	18	4	6	0	19	3	1	6
25	18	2	10	6	19	1	8	3	20	0	9	0
26	18	11	7	7	19	10	10	6	20	10	4	7
27	19	8	4	8	20	8	0	9	21	8	0	2
28	20	5	1	9	21	5	3	0	22	5	7	9
29	21	1	10	9	22	2	5	3	23	3	3	3
30	21	10	7	10	22	11	7	6	24	0	10	10
31	22	7	4	11	23	8	9	9	24	10	6	5
32	23	4	2	0	24	6	0	0	25	8	2	0
33	24	0	11	0	25	3	2	3	26	5	9	6
34	24	9	8	1	26	0	4	6	27	3	5	1
35	25	6	5	2	26	9	6	9	28	1	0	8
36	26	3	2	3	27	6	9	0	28	10	8	3
37	26	11	11	3	28	3	11	3	29	8	3	9
38	27	8	8	4	29	1	1	6	30	5	11	4
39	28	5	5	5	29	10	3	9	31	3	6	11
40	29	2	2	6	30	7	6	0	32	1	2	6
80	58	4	5	0	61	3	0	0	64	2	5	0

Feet Long.	Side 11 In.				Side 11½ In.				Side 11⅓ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft	In.	Pts.	2ds.
¼	0	2	6	3	0	2	7	7	0	2	9	0
⅓	0	5	0	6	0	5	3	3	0	5	6	1
½	0	7	6	9	0	7	10	11	0	8	3	2
1	0	10	1	0	0	10	6	6	0	11	0	3
2	1	8	2	0	1	9	1	1	1	10	0	6
3	2	6	3	0	2	7	7	8	2	9	0	9
4	3	4	4	0	3	6	2	3	3	8	1	0
5	4	2	5	0	4	4	8	9	4	7	1	3
6	5	0	6	0	5	3	3	4	5	6	1	6
7	5	10	7	0	6	1	9	11	6	5	1	9
8	6	8	8	0	7	0	4	6	7	4	2	0
9	7	6	9	0	7	10	11	0	8	3	2	3
10	8	4	10	0	8	9	5	7	9	2	2	6
11	9	2	11	0	9	8	0	2	10	1	2	9
12	10	1	0	0	10	6	6	9	11	0	3	0
13	10	11	1	0	11	5	1	3	11	11	3	3
14	11	9	2	0	12	3	7	10	12	10	3	6
15	12	7	3	0	13	2	2	5	13	9	3	9
16	13	5	4	0	14	0	9	0	14	8	4	0
17	14	3	5	0	14	11	3	6	15	7	4	3
18	15	1	6	0	15	9	10	1	16	6	4	6
19	15	11	7	0	16	8	4	8	17	5	4	9
20	16	9	8	0	17	6	11	3	18	4	5	0
21	17	7	9	0	18	5	5	9	19	3	5	3
22	18	5	10	0	19	4	0	4	20	2	5	6
23	19	3	11	0	20	2	6	11	21	1	5	9
24	20	2	0	0	21	1	1	6	22	0	6	0
25	21	0	1	0	21	11	8	0	22	11	6	3
26	21	10	2	0	22	10	2	7	23	10	6	6
27	22	8	3	0	23	8	9	2	24	9	6	9
28	23	6	4	0	24	7	3	9	25	8	7	0
29	24	4	5	0	25	5	10	3	26	7	7	3
30	25	2	6	0	26	4	4	10	27	6	7	6
31	26	0	7	0	27	2	11	5	28	5	7	9
32	26	10	8	0	28	1	6	0	29	4	8	0
33	27	8	9	0	29	0	0	6	30	3	8	3
34	28	6	10	0	29	10	7	1	31	2	8	6
35	29	4	11	0	30	9	1	8	32	1	8	9
36	30	3	0	0	31	7	8	3	33	0	9	0
37	31	1	1	0	32	6	2	9	33	11	9	3
38	31	11	2	0	33	4	9	4	34	10	9	6
39	32	9	3	0	34	3	3	11	35	9	9	9
40	33	7	4	0	35	1	10	6	36	8	10	0
80	67	2	8	0	70	3	9	0	73	5	8	0

Feet Long.	Side 11¾ In.				Side 12 In.				Side 12¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	2	10	6	0	3	0	0	0	3	1	6
½	0	5	9	0	0	6	0	0	0	6	3	0
¾	0	8	7	6	0	9	0	0	0	9	4	6
1	0	11	6	0	1	0	0	0	1	0	6	0
2	1	11	0	1	2	0	0	0	2	1	0	1
3	2	10	6	2	3	0	0	0	3	1	6	2
4	3	10	0	3	4	0	0	0	4	2	0	3
5	4	9	6	3	5	0	0	0	5	2	6	3
6	5	9	0	4	6	0	0	0	6	3	0	4
7	6	8	6	5	7	0	0	0	7	3	6	5
8	7	8	0	6	8	0	0	0	8	4	0	6
9	8	7	6	6	9	0	0	0	9	4	6	6
10	9	7	0	7	10	0	0	0	10	5	0	7
11	10	6	6	8	11	0	0	0	11	5	6	8
12	11	6	0	9	12	0	0	0	12	6	0	9
13	12	5	6	9	13	0	0	0	13	6	6	9
14	13	5	0	10	14	0	0	0	14	7	0	10
15	14	4	6	11	15	0	0	0	15	7	6	11
16	15	4	1	0	16	0	0	0	16	8	1	0
17	16	3	7	0	17	0	0	0	17	8	7	0
18	17	3	1	1	18	0	0	0	18	9	1	1
19	18	2	7	2	19	0	0	0	19	9	7	2
20	19	2	1	3	20	0	0	0	20	10	1	3
21	20	1	7	3	21	0	0	0	21	10	7	3
22	21	1	1	4	22	0	0	0	22	11	1	4
23	22	0	7	5	23	0	0	0	23	11	7	5
24	23	0	1	6	24	0	0	0	25	0	1	6
25	23	11	7	6	25	0	0	0	26	0	7	6
26	24	11	1	7	26	0	0	0	27	1	1	7
27	25	10	7	8	27	0	0	0	28	1	7	8
28	26	10	1	9	28	0	0	0	29	2	1	9
29	27	9	7	9	29	0	0	0	30	2	7	9
30	28	9	1	10	30	0	0	0	31	3	1	10
31	29	8	7	11	31	0	0	0	32	3	7	11
32	30	8	2	0	32	0	0	0	33	4	2	0
33	31	7	8	0	33	0	0	0	34	4	8	0
34	32	7	2	1	34	0	0	0	35	5	2	1
35	33	6	8	2	35	0	0	0	36	5	8	2
36	34	6	2	3	36	0	0	0	37	6	2	3
37	35	5	8	3	37	0	0	0	38	6	8	3
38	36	5	2	4	38	0	0	0	39	7	2	4
39	37	4	8	5	39	0	0	0	40	7	8	5
40	38	4	2	6	40	0	0	0	41	8	2	6
80	76	8	5	0	80	0	0	0	83	4	5	0

Feet Long.	Side 12½ In.				Side 12¾ In.				Side 13 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	3	3	0	0	3	4	7	0	3	6	3
½	0	6	6	1	0	6	9	3	0	7	0	6
¾	0	9	9	2	0	10	1	11	0	10	6	9
1	1	1	0	3	1	1	6	6	1	2	1	0
2	2	2	0	6	2	3	1	1	2	4	2	0
3	3	3	0	9	3	4	7	8	3	6	3	0
4	4	4	1	0	4	6	2	3	4	8	4	0
5	5	5	1	3	5	7	8	9	5	10	5	0
6	6	6	1	6	6	9	3	4	7	0	6	0
7	7	7	1	9	7	10	9	11	8	2	7	0
8	8	8	2	0	9	0	4	6	9	4	8	0
9	9	9	2	3	10	1	11	0	10	6	9	0
10	10	10	2	6	11	3	5	7	11	8	10	0
11	11	11	2	9	12	5	0	2	12	10	11	0
12	13	0	3	0	13	6	6	9	14	1	0	0
13	14	1	3	3	14	8	1	3	15	3	1	0
14	15	2	3	6	15	9	7	10	16	5	2	0
15	16	3	3	9	16	11	2	5	17	7	3	0
16	17	4	4	0	18	0	9	0	18	9	4	0
17	18	5	4	3	19	2	3	6	19	11	5	0
18	19	6	4	6	20	3	10	1	21	1	6	0
19	20	7	4	9	21	5	4	8	22	3	7	0
20	21	8	5	0	22	6	11	3	23	5	8	0
21	22	9	5	3	23	8	5	9	24	7	9	0
22	23	10	5	6	24	10	0	4	25	9	10	0
23	24	11	5	9	25	11	6	11	26	11	11	0
24	26	0	6	0	27	1	1	6	28	2	0	0
25	27	1	6	3	28	2	8	0	29	4	1	0
26	28	2	6	6	29	4	2	7	30	6	2	0
27	29	3	6	9	30	5	9	2	31	8	3	0
28	30	4	7	0	31	7	3	9	32	10	4	0
29	31	5	7	3	32	8	10	3	34	0	5	0
30	32	6	7	6	33	10	4	10	35	2	6	0
31	33	7	7	9	34	11	11	5	36	4	7	0
32	34	8	8	0	36	1	6	0	37	6	8	0
33	35	9	8	3	37	3	0	6	38	8	9	0
34	36	10	8	6	38	4	7	1	39	10	10	0
35	37	11	8	9	39	6	1	8	41	0	11	0
36	39	0	9	0	40	7	8	3	42	3	0	0
37	40	1	9	3	41	9	2	9	43	5	1	0
38	41	2	9	6	42	10	9	4	44	7	2	0
39	42	3	9	9	44	0	3	11	45	9	3	0
40	43	4	10	0	45	1	10	6	46	11	4	0
80	86	9	8	0	90	3	9	0	93	10	8	0

Feet Long.	Side 13¼ In.				Side 13⅓ In.				Side 13¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	3	7	10	0	3	9	6	0	3	11	3
½	0	7	3	9	0	7	7	1	0	7	10	6
¾	0	10	11	8	0	11	4	8	0	11	9	9
1	1	2	7	6	1	3	2	3	1	3	9	0
2	2	5	3	1	2	6	4	6	2	7	6	1
3	3	7	10	8	3	9	6	9	3	11	3	2
4	4	10	6	3	5	0	9	0	5	3	0	3
5	6	1	1	9	6	3	11	3	6	6	9	3
6	7	3	9	4	7	7	1	6	7	10	6	4
7	8	6	4	11	8	10	3	9	9	2	3	5
8	9	9	0	6	10	1	6	0	10	6	0	6
9	10	11	8	0	11	4	8	3	11	9	9	6
10	12	2	3	7	12	7	10	6	13	1	6	7
11	13	4	11	2	13	11	0	9	14	5	3	8
12	14	7	6	9	15	2	3	0	15	9	0	9
13	15	10	2	3	16	5	5	3	17	0	9	9
14	17	0	9	10	17	8	7	6	18	4	6	10
15	18	3	5	5	18	11	9	9	19	8	3	11
16	19	6	1	0	20	3	0	0	21	0	1	0
17	20	8	8	6	21	6	2	3	22	3	10	0
18	21	11	4	1	22	9	4	6	23	7	7	1
19	23	1	11	8	24	0	6	9	24	11	4	2
20	24	4	7	3	25	3	9	0	26	3	1	3
21	25	7	2	9	26	6	11	3	27	6	10	3
22	26	9	10	4	27	10	1	6	28	10	7	4
23	28	0	5	11	29	1	3	9	30	2	4	5
24	29	3	1	6	30	4	6	0	31	6	1	6
25	30	5	9	0	31	7	8	3	32	9	10	6
26	31	8	4	7	32	10	10	6	34	1	7	7
27	32	11	0	2	34	2	0	9	35	5	4	8
28	34	1	7	9	35	5	3	0	36	9	1	9
29	35	4	3	3	36	8	5	3	38	0	10	9
30	36	6	10	10	37	11	7	6	39	4	7	10
31	37	9	6	5	39	2	9	9	40	8	4	11
32	39	0	2	0	40	6	0	0	42	0	2	0
33	40	2	9	6	41	9	2	3	43	3	11	0
34	41	5	5	1	43	0	4	6	44	7	8	1
35	42	8	0	8	44	3	6	9	45	11	5	2
36	43	10	8	3	45	6	9	0	47	3	2	3
37	45	1	3	9	46	9	11	3	48	6	11	3
38	46	3	11	4	48	1	1	6	49	10	8	4
39	47	6	6	11	49	4	3	9	51	2	5	5
40	48	9	2	6	50	7	6	0	52	6	2	6
80	97	6	5	0	101	3	0	0	105	0	5	0

Feet Long.	Side 14 In.				Side 14¼ In.				Side 14⅓ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	4	1	0	0	4	2	9	0	4	4	6
½	0	8	2	0	0	8	5	6	0	8	9	1
¾	1	0	3	0	1	0	8	3	1	1	1	8
1	1	4	4	0	1	4	11	0	1	5	6	3
2	2	8	8	0	2	9	10	1	2	11	0	6
3	4	1	0	0	4	2	9	2	4	4	6	9
4	5	5	4	0	5	7	8	3	5	10	1	0
5	6	9	8	0	7	0	7	3	7	3	7	3
6	8	2	0	0	8	5	6	4	8	9	1	6
7	9	6	4	0	9	10	5	5	10	2	7	9
8	10	10	8	0	11	3	4	6	11	8	2	0
9	12	3	0	0	12	8	3	6	13	1	8	3
10	13	7	4	0	14	1	2	7	14	7	2	6
11	14	11	8	0	15	6	1	8	16	0	8	9
12	16	4	0	0	16	11	0	9	17	6	3	0
13	17	8	4	0	18	3	11	9	18	11	9	3
14	19	0	8	0	19	8	10	10	20	5	3	6
15	20	5	0	0	21	1	9	11	21	10	9	9
16	21	9	4	0	22	6	9	0	23	4	4	0
17	23	1	8	0	23	11	8	0	24	9	10	3
18	24	6	0	0	25	4	7	1	26	3	4	6
19	25	10	4	0	26	9	6	2	27	8	10	9
20	27	2	8	0	28	2	5	3	29	2	5	0
21	28	7	0	0	29	7	4	3	30	7	11	3
22	29	11	4	0	31	0	3	4	32	1	5	6
23	31	3	8	0	32	5	2	5	33	6	11	9
24	32	8	0	0	33	10	1	6	35	0	6	0
25	34	0	4	0	35	3	0	6	36	6	0	3
26	35	4	8	0	36	7	11	7	37	11	6	6
27	36	9	0	0	38	0	10	8	39	5	0	9
28	38	1	4	0	39	5	9	9	40	10	7	0
29	39	5	8	0	40	10	8	9	42	4	1	3
30	40	10	0	0	42	3	7	10	43	9	7	6
31	42	2	4	0	43	8	6	11	45	3	1	9
32	43	6	8	0	45	1	6	0	46	8	8	0
33	44	11	0	0	46	6	5	0	48	2	2	3
34	46	3	4	0	47	11	4	1	49	7	8	6
35	47	7	8	0	49	4	3	2	51	1	2	9
36	49	0	0	0	50	9	2	3	52	6	9	0
37	50	4	4	0	52	2	1	3	54	0	3	3
38	51	8	8	0	53	7	0	4	55	5	9	6
39	53	1	0	0	54	11	11	5	56	11	3	9
40	54	5	4	0	56	4	10	6	58	4	10	0
80	108	10	8	0	112	9	9	0	116	9	8	0

Feet Long.	Side 14¾ In.				Side 15 In.				Side 15¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	4	6	4	0	4	8	3	0	4	10	1
½	0	9	0	9	0	9	4	6	0	9	8	3
¾	1	1	7	2	1	2	0	9	1	2	6	5
1	1	6	1	6	1	6	9	0	1	7	4	6
2	3	0	3	1	3	1	6	0	3	2	9	1
3	4	6	4	8	4	8	3	0	4	10	1	8
4	6	0	6	3	6	3	0	0	6	5	6	3
5	7	6	7	9	7	9	9	0	8	0	10	9
6	9	0	9	4	9	4	6	0	9	8	3	4
7	10	6	10	11	10	11	3	0	11	3	7	11
8	12	1	0	6	12	6	0	0	12	11	0	6
9	13	7	2	0	14	0	9	0	14	6	5	0
10	15	1	3	7	15	7	6	0	16	1	9	7
11	16	7	5	2	17	2	3	0	17	9	2	2
12	18	1	6	9	18	9	0	0	19	4	6	9
13	19	7	8	3	20	3	9	0	20	11	11	3
14	21	1	9	10	21	10	6	0	22	7	3	10
15	22	7	11	5	23	5	3	0	24	2	8	5
16	24	2	1	0	25	0	0	0	25	10	1	0
17	25	8	2	6	26	6	9	0	27	5	5	6
18	27	2	4	1	28	1	6	0	29	0	10	1
19	28	8	5	8	29	8	3	0	30	8	2	8
20	30	2	7	3	31	3	0	0	32	3	7	3
21	31	8	8	9	32	9	9	0	33	10	11	9
22	33	2	10	4	34	4	6	0	35	6	4	4
23	34	8	11	11	35	11	3	0	37	1	8	11
24	36	3	1	6	37	6	0	0	38	9	1	6
25	37	9	3	0	39	0	9	0	40	4	6	0
26	39	3	4	7	40	7	6	0	41	11	10	7
27	40	9	6	2	42	2	3	0	43	7	3	2
28	42	3	7	9	43	9	0	0	45	2	7	9
29	43	9	9	3	45	3	9	0	46	10	0	3
30	45	3	10	10	46	10	6	0	48	5	4	10
31	46	10	0	5	48	5	3	0	50	0	9	5
32	48	4	2	0	50	0	0	0	51	8	2	0
33	49	10	3	6	51	6	9	0	53	3	6	6
34	51	4	5	1	53	1	6	0	54	10	11	1
35	52	10	6	8	54	8	3	0	56	6	3	8
36	54	4	8	3	56	3	0	0	58	1	8	3
37	55	10	9	9	57	9	9	0	59	9	0	9
38	57	4	11	4	59	4	6	0	61	4	5	4
39	58	11	0	11	60	1	3	0	62	11	9	11
40	60	5	2	6	62	6	0	0	64	7	2	6
80	120	10	5	0	125	0	0	0	129	2	5	0

Feet Long.	Side 15½ In.				Side 15¾ In.				Side 16 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	5	0	0	0	5	2	0	0	5	4	0
½	0	10	0	1	0	10	4	0	0	10	8	0
¾	1	3	0	2	1	3	6	0	1	4	0	0
1	1	8	0	3	1	8	8	0	1	9	4	0
2	3	4	0	6	3	5	4	1	3	6	8	0
3	5	0	0	9	5	2	0	2	5	4	0	0
4	6	8	1	0	6	10	8	3	7	1	4	0
5	8	4	1	3	8	7	4	3	8	10	8	0
6	10	0	1	6	10	4	0	4	10	8	0	0
7	11	8	1	9	12	0	8	5	12	5	4	0
8	13	4	2	0	13	9	4	6	14	2	8	0
9	15	0	2	3	15	6	0	6	16	0	0	0
10	16	8	2	6	17	2	8	7	17	9	4	0
11	18	4	2	9	18	11	4	8	19	6	8	0
12	20	0	3	0	20	8	0	9	21	4	0	0
13	21	8	3	3	22	4	8	9	23	1	4	0
14	23	4	3	6	24	1	4	10	24	10	8	0
15	25	0	3	9	25	10	0	11	26	8	0	0
16	26	8	4	0	27	6	9	0	28	5	4	0
17	28	4	4	3	29	3	5	0	30	2	8	0
18	30	0	4	6	31	0	1	1	32	0	0	0
19	31	8	4	9	32	8	9	2	33	9	4	0
20	33	4	5	0	34	5	5	3	35	6	8	0
21	35	0	5	3	36	2	1	3	37	4	0	0
22	36	8	5	6	37	10	9	4	39	1	4	0
23	38	4	5	9	39	7	5	5	40	10	8	0
24	40	0	6	0	41	4	1	6	42	8	0	0
25	41	8	6	3	43	0	9	6	44	5	4	0
26	43	4	6	6	44	9	5	7	46	2	8	0
27	45	0	6	9	46	6	1	8	48	0	0	0
28	46	8	7	0	48	2	9	9	49	9	4	0
29	48	4	7	3	49	11	5	9	51	6	8	0
30	50	0	7	6	51	8	1	10	53	4	0	0
31	51	8	7	9	53	4	9	11	55	1	4	0
32	53	4	8	0	55	1	6	0	56	10	8	0
33	55	0	8	3	56	10	2	0	58	8	0	0
34	56	8	8	6	58	6	10	1	60	5	4	0
35	58	4	8	9	60	3	6	2	62	2	8	0
36	60	0	9	0	62	0	2	3	64	0	0	0
37	61	8	9	3	63	8	10	3	65	9	4	0
38	63	4	9	6	65	5	6	4	67	6	8	0
39	65	0	9	9	67	2	2	5	69	4	0	0
40	66	8	10	0	68	10	10	6	71	1	4	0
80	133	5	8	0	137	9	9	0	142	2	8	0

Feet Long.	Side 16¼ In.				Side 16½ In.				Side 16¾ In.			
	Ft.	In.	Pts.	2ds	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	5	6	0	0	5	8	0	0	5	10	1
½	0	11	0	0	0	11	4	1	0	11	8	3
¾	1	4	6	0	1	5	0	2	1	5	6	5
1	1	10	0	0	1	10	8	3	1	11	4	6
2	3	8	0	1	3	9	4	6	3	10	9	1
3	5	6	0	2	5	8	0	9	5	10	1	8
4	7	4	0	3	7	6	9	0	7	9	6	3
5	9	2	0	3	9	5	5	3	9	8	10	9
6	11	0	0	4	11	4	1	6	11	8	3	4
7	12	10	0	5	13	2	9	9	13	7	7	11
8	14	8	0	6	15	1	6	0	15	7	0	6
9	16	6	0	6	17	0	2	3	17	6	5	0
10	18	4	0	7	18	10	10	6	19	5	9	7
11	20	2	0	8	20	9	6	9	21	5	2	2
12	22	0	0	9	22	8	3	0	23	4	6	9
13	23	10	0	9	24	6	11	3	25	3	11	3
14	25	8	0	10	26	5	7	6	27	3	3	10
15	27	6	0	11	28	4	3	9	29	2	8	5
16	29	4	1	0	30	3	0	0	31	2	1	0
17	31	2	1	0	32	1	8	3	33	1	5	6
18	33	0	1	1	34	0	4	6	35	0	10	1
19	34	10	1	2	35	11	0	9	37	0	2	8
20	36	8	1	3	37	9	9	0	38	11	7	3
21	38	6	1	3	39	8	5	3	40	10	11	9
22	40	4	1	4	41	7	1	6	42	10	4	4
23	42	2	1	5	43	5	9	9	44	9	8	11
24	44	0	1	6	45	4	6	0	46	9	1	6
25	45	10	1	6	47	3	2	3	48	8	6	0
26	47	8	1	7	49	1	10	6	50	7	10	7
27	49	6	1	8	51	0	6	9	52	7	3	2
28	51	4	1	9	52	11	3	0	54	6	7	9
29	53	2	1	9	54	9	11	3	56	6	0	3
30	55	0	1	10	56	8	7	6	58	5	4	10
31	56	10	1	11	58	7	3	9	60	4	9	5
32	58	8	2	0	60	6	0	0	62	4	2	0
33	60	6	2	0	62	4	8	3	64	3	6	6
34	62	4	2	1	64	3	4	6	66	2	11	1
35	64	2	2	2	66	2	0	9	68	2	3	8
36	66	0	2	3	68	0	9	0	70	1	8	3
37	67	10	2	3	69	11	5	3	72	1	0	9
38	69	8	2	4	71	10	1	6	74	0	5	4
39	71	6	2	5	73	8	9	9	75	11	9	11
40	73	4	2	6	75	7	6	0	77	11	2	6
80	146	8	5	0	151	3	0	0	155	10	5	0

Feet Long.	Side 17 In.				Side 17¼ In.				Side 17½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	6	0	3	0	6	2	4	0	6	4	6
½	1	0	0	6	1	0	4	9	1	0	9	1
¾	1	6	0	9	1	6	7	2	1	7	1	8
1	2	0	1	0	2	0	9	6	2	1	6	3
2	4	0	2	0	4	1	7	1	4	3	0	6
3	6	0	3	0	6	2	4	8	6	4	6	9
4	8	0	4	0	8	3	2	3	8	6	1	0
5	10	0	5	0	10	3	11	9	10	7	7	3
6	12	0	6	0	12	4	9	4	12	9	1	6
7	14	0	7	0	14	5	6	11	14	10	7	9
8	16	0	8	0	16	6	4	6	17	0	2	0
9	18	0	9	0	18	7	2	0	19	1	8	3
10	20	0	10	0	20	7	11	7	21	3	2	6
11	22	0	11	0	22	8	9	2	23	4	8	9
12	24	1	0	0	24	9	6	9	25	6	3	0
13	26	1	1	0	26	10	4	3	27	7	9	3
14	28	1	2	0	28	11	1	10	29	9	3	6
15	30	1	3	0	30	11	11	5	31	10	9	9
16	32	1	4	0	33	0	9	0	34	0	4	0
17	34	1	5	0	35	1	6	6	36	1	10	3
18	36	1	6	0	37	2	4	1	38	3	4	6
19	38	1	7	0	39	3	1	8	40	4	10	9
20	40	1	8	0	41	3	11	3	42	6	5	0
21	42	1	9	0	43	4	8	9	44	7	11	3
22	44	1	10	0	45	5	6	4	46	9	5	6
23	46	1	11	0	47	6	3	11	48	10	11	9
24	48	2	0	0	49	7	1	6	51	0	6	0
25	50	2	1	0	51	7	11	0	53	2	0	3
26	52	2	2	0	53	8	8	7	55	3	6	6
27	54	2	3	0	55	9	6	2	57	5	0	9
28	56	2	4	0	57	10	3	9	59	6	7	0
29	58	2	5	0	59	11	1	3	61	8	1	3
30	60	2	6	0	61	11	10	10	63	9	7	6
31	62	2	7	0	64	0	8	5	65	11	1	9
32	64	2	8	0	66	1	6	0	68	0	8	0
33	66	2	9	0	68	2	3	6	70	2	2	3
34	68	2	10	0	70	3	1	1	72	3	8	6
35	70	2	11	0	72	3	10	8	74	5	2	9
36	72	3	0	0	74	4	8	3	76	6	9	0
37	74	3	1	0	76	5	5	9	78	8	3	3
38	76	3	2	0	78	6	3	4	80	9	9	6
39	78	3	3	0	80	7	0	11	82	11	3	9
40	80	3	4	0	82	7	10	6	85	0	10	0
80	160	6	8	0	165	3	9	0	170	1	8	0

Feet Long.	Side 17¾ In.				Side 18 In.				Side 18¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In	Pts.	2ds.
¼	0	6	6	9	0	6	9	0	0	6	11	3
½	1	1	1	6	1	1	6	0	1	1	10	6
¾	1	7	8	3	1	8	3	0	1	8	9	9
1	2	2	3	0	2	3	0	0	2	3	9	0
2	4	4	6	1	4	6	0	0	4	7	6	1
3	6	6	9	2	6	9	0	0	6	11	3	2
4	8	9	0	3	9	0	0	0	9	3	0	3
5	10	11	3	3	11	3	0	0	11	6	9	3
6	13	1	6	4	13	6	0	0	13	10	6	4
7	15	3	9	5	15	9	0	0	16	2	3	5
8	17	6	0	6	18	0	0	0	18	6	0	6
9	19	8	3	6	20	3	0	0	20	9	9	6
10	21	10	6	7	22	6	0	0	23	1	6	7
11	24	0	9	8	24	9	0	0	25	5	3	8
12	26	3	0	9	27	0	0	0	27	9	0	9
13	28	5	3	9	29	3	0	0	30	0	9	9
14	30	7	6	10	31	6	0	0	32	4	6	10
15	32	9	9	11	33	9	0	0	34	8	3	11
16	35	0	1	0	36	0	0	0	37	0	1	0
17	37	2	4	0	38	3	0	0	39	3	10	0
18	39	4	7	1	40	6	0	0	41	7	7	1
19	41	6	10	2	42	9	0	0	43	11	4	2
20	43	9	1	3	45	0	0	0	46	3	1	3
21	45	11	4	3	47	3	0	0	48	6	10	3
22	48	1	7	4	49	6	0	0	50	10	7	4
23	50	3	10	5	51	9	0	0	53	2	4	5
24	52	6	1	6	54	0	0	0	55	6	1	6
25	54	8	4	6	56	3	0	0	57	9	10	6
26	56	10	7	7	58	6	0	0	60	1	7	7
27	59	0	10	8	60	9	0	0	62	5	4	8
28	61	3	1	9	63	0	0	0	64	9	1	9
29	63	5	4	9	65	3	0	0	67	0	10	9
30	65	7	7	10	67	6	0	0	69	4	7	10
31	67	9	10	11	69	9	0	0	71	8	4	11
32	70	0	2	0	72	0	0	0	74	0	2	0
33	72	2	5	0	74	3	0	0	76	3	11	0
34	74	4	8	1	76	6	0	0	78	7	8	1
35	76	6	11	2	78	9	0	0	80	11	5	2
36	78	9	2	3	81	0	0	0	83	3	2	3
37	80	11	5	3	83	3	0	0	85	6	11	3
38	83	1	8	4	85	6	0	0	87	10	8	4
39	85	3	11	5	87	9	0	0	90	2	5	5
40	87	6	2	6	90	0	0	0	92	6	2	6
80	175	0	5	0	180	0	0	0	185	0	5	0

Feet Long.	Side 18⅛ In.				Side 18¼ In.				Side 19 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	7	1	6	0	7	3	10	0	7	6	3
½	1	2	3	1	1	2	7	9	1	3	0	6
¾	1	9	4	8	1	9	11	8	1	10	6	9
1	2	4	6	3	2	5	3	6	2	6	1	0
2	4	9	0	6	4	10	7	1	5	0	2	0
3	7	1	6	9	7	3	10	8	7	6	3	0
4	9	6	1	0	9	9	2	3	10	0	4	0
5	11	10	7	3	12	2	5	9	12	6	5	0
6	14	3	1	6	14	7	9	4	15	0	6	0
7	16	7	7	9	17	1	0	11	17	6	7	0
8	19	0	2	0	19	6	4	6	20	0	8	0
9	21	4	8	3	21	11	8	0	22	6	9	0
10	23	9	2	6	24	4	11	7	25	0	10	0
11	26	1	8	9	26	10	3	2	27	6	11	0
12	28	6	3	0	29	3	6	9	30	1	0	0
13	30	10	9	3	31	8	10	3	32	7	1	0
14	33	3	3	6	34	2	1	10	35	1	2	0
15	35	7	9	9	36	7	5	5	37	7	3	0
16	38	0	4	0	39	0	9	0	40	1	4	0
17	40	4	10	3	41	6	0	6	42	7	5	0
18	42	9	4	6	43	11	4	1	45	1	6	0
19	45	1	10	9	46	4	7	8	47	7	7	0
20	47	6	5	0	48	9	11	3	50	1	8	0
21	49	10	11	3	51	3	2	9	52	7	9	0
22	52	3	5	6	53	8	6	4	55	1	10	0
23	54	7	11	9	56	1	9	11	57	7	11	0
24	57	0	6	0	58	7	1	6	60	2	0	0
25	59	5	0	3	61	0	5	0	62	8	1	0
26	61	9	6	6	63	5	8	7	65	2	2	0
27	64	2	0	9	65	11	0	2	67	8	3	0
28	66	6	7	0	68	4	3	9	70	2	4	0
29	68	11	1	3	70	9	7	3	72	8	5	0
30	71	3	7	6	73	2	10	10	75	2	6	0
31	73	8	1	9	75	8	2	5	77	8	7	0
32	76	0	8	0	78	1	6	0	80	2	8	0
33	78	5	2	3	80	6	9	6	82	8	9	0
34	80	9	8	6	83	0	1	1	85	2	10	0
35	83	2	2	9	85	5	4	8	87	8	11	0
36	85	6	9	0	87	10	8	3	90	3	0	0
37	87	11	3	3	90	3	11	9	92	9	1	0
38	90	3	9	6	92	9	3	4	95	3	2	0
39	92	8	3	9	95	2	6	11	97	9	3	0
40	95	0	10	0	97	7	10	6	100	3	4	0
80	190	1	8	0	195	3	9	0	200	6	8	0

Feet Long.	Side 19¼ In.				Side 19⅓ In.				Side 19⅜ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	7	8	7	0	7	11	0	0	8	1	6
½	1	3	5	3	1	3	10	1	1	4	3	0
¾	1	11	1	11	1	11	9	2	2	0	4	6
1	2	6	10	6	2	7	8	3	2	8	6	0
2	5	1	9	1	5	3	4	6	5	5	0	1
3	7	8	7	8	7	11	0	9	8	1	6	2
4	10	3	6	3	10	6	9	0	10	10	0	3
5	12	10	4	9	13	2	5	3	13	6	6	3
6	15	5	3	4	15	10	1	6	16	3	0	4
7	18	0	1	11	18	5	9	9	18	11	6	5
8	20	7	0	6	21	1	6	0	21	8	0	6
9	23	1	11	0	23	9	2	3	24	4	6	6
10	25	8	9	7	26	4	10	6	27	1	0	7
11	28	3	8	2	29	0	6	9	29	9	6	8
12	30	10	6	9	31	8	3	0	32	6	0	9
13	33	5	5	4	34	3	11	3	35	2	6	9
14	36	0	3	10	36	11	7	6	37	11	0	10
15	38	7	2	5	39	7	3	9	40	7	6	11
16	41	2	1	0	42	3	0	0	43	4	1	0
17	43	8	11	6	44	10	8	3	46	0	7	0
18	46	3	10	1	47	6	4	6	48	9	1	1
19	48	10	8	8	50	2	0	9	51	5	7	2
20	51	5	7	3	52	9	9	0	54	2	1	3
21	54	0	5	9	55	5	5	3	56	10	7	3
22	56	7	4	4	58	1	1	6	59	7	1	4
23	59	2	2	11	60	8	9	9	62	3	7	5
24	61	9	1	6	63	4	6	0	65	0	1	6
25	64	4	0	0	66	0	2	3	67	8	7	6
26	66	10	10	7	68	7	10	6	70	5	1	7
27	69	5	9	2	71	3	6	9	73	1	7	8
28	72	0	7	9	73	11	3	0	75	10	1	9
29	74	7	6	4	76	6	11	3	78	6	7	9
30	77	2	4	10	79	2	7	6	81	3	1	10
31	79	9	3	5	81	10	3	9	83	11	7	11
32	82	4	2	0	84	6	0	0	86	8	2	0
33	84	11	0	6	87	1	8	3	89	4	8	0
34	87	5	11	1	89	9	4	6	92	1	2	1
35	90	0	9	8	92	5	0	9	94	9	8	2
36	92	7	8	3	95	0	9	0	97	6	2	3
37	95	2	6	9	97	8	5	3	100	2	8	3
38	97	9	5	4	100	4	1	6	102	11	2	4
39	100	4	3	11	102	11	9	9	105	7	8	5
40	102	11	2	6	105	7	6	0	108	4	2	6
80	205	10	5	0	211	3	0	0	216	8	5	0

Feet Long.	Side 20 In.				Side 20¼ In.				Side 20½ In.			
	Ft	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	8	4	0	0	8	6	6	0	8	9	0
½	1	4	8	0	1	5	1	0	1	5	6	0
¾	2	1	0	0	2	1	7	6	2	2	3	0
1	2	9	4	0	2	10	2	0	2	11	0	3
2	5	6	8	0	5	8	4	1	5	10	0	6
3	8	4	0	0	8	6	6	2	8	9	0	9
4	11	1	4	0	11	4	8	3	11	8	1	0
5	13	10	8	0	14	2	10	3	14	7	1	3
6	16	8	0	0	17	1	0	4	17	6	1	6
7	19	5	4	0	19	11	2	5	20	5	1	9
8	22	2	8	0	22	9	4	6	23	4	2	0
9	25	0	0	0	25	7	6	6	26	3	2	3
10	27	9	4	0	28	5	8	7	29	2	2	6
11	30	6	8	0	31	3	10	8	32	1	2	9
12	33	4	0	0	34	2	0	9	35	0	3	0
13	36	1	4	0	37	0	2	9	37	11	3	3
14	38	10	8	0	39	10	4	10	40	10	3	6
15	41	8	0	0	42	8	6	11	43	9	3	9
16	44	5	4	0	45	6	9	0	46	8	4	0
17	47	2	8	0	48	4	11	0	49	7	4	3
18	50	0	0	0	51	3	1	1	52	6	4	6
19	52	9	4	0	54	1	3	2	55	5	4	9
20	55	6	8	0	56	11	5	3	58	4	5	0
21	58	4	0	0	59	9	7	3	61	3	5	3
22	61	1	4	0	62	7	9	4	64	2	5	6
23	63	10	8	0	65	5	11	5	67	1	5	9
24	66	8	0	0	68	4	1	6	70	0	6	0
25	69	5	4	0	71	2	3	6	72	11	6	3
26	72	2	8	0	74	0	5	7	75	10	6	6
27	75	0	0	0	76	10	7	8	78	9	6	9
28	77	9	4	0	79	8	9	9	81	8	7	0
29	80	6	8	0	82	6	11	9	84	7	7	3
30	83	4	0	0	85	5	1	10	87	6	7	6
31	86	1	4	0	88	3	3	11	90	5	7	9
32	88	10	8	0	91	1	6	0	93	4	8	0
33	91	8	0	0	93	11	8	0	96	3	8	3
34	94	5	4	0	96	9	10	1	99	2	8	6
35	97	2	8	0	99	8	0	2	102	1	8	9
36	100	0	0	0	102	6	2	3	105	0	9	0
37	102	9	4	0	105	4	4	3	107	11	9	3
38	105	6	8	0	108	2	6	4	110	10	9	6
39	108	4	0	0	111	0	8	5	113	9	9	9
40	111	1	4	0	113	10	10	6	116	8	10	0
80	222	2	8	0	227	9	9	0	233	5	8	0

Feet Long.	Side 20¾ In.				Side 21 In.				Side 21¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	8	11	7	0	9	2	3	0	9	4	10
½	1	5	11	3	1	6	4	6	1	6	9	9
¾	2	2	10	11	2	3	6	9	2	4	2	8
1	2	11	10	6	3	0	9	0	3	1	7	6
2	5	11	9	1	6	1	6	0	6	3	3	1
3	8	11	7	8	9	2	3	0	9	4	10	8
4	11	11	6	3	12	3	0	0	12	6	6	3
5	14	11	4	9	15	3	9	0	15	8	1	9
6	17	11	3	4	18	4	6	0	18	9	9	4
7	20	11	1	11	21	5	3	0	21	11	4	11
8	23	11	0	6	24	6	0	0	25	1	0	6
9	26	10	11	0	27	6	9	0	28	2	8	0
10	29	10	9	7	30	7	6	0	31	4	3	7
11	32	10	8	2	33	8	3	0	34	5	11	2
12	35	10	6	9	36	9	0	0	37	7	6	9
13	38	10	5	3	39	9	9	0	40	9	2	3
14	41	10	3	10	42	10	6	0	43	10	9	10
15	44	10	2	5	45	11	3	0	47	0	5	5
16	47	10	1	0	49	0	0	0	50	2	1	0
17	50	9	11	6	52	0	9	0	53	3	8	6
18	53	9	10	1	55	1	6	0	56	5	4	1
19	56	9	8	8	58	2	3	0	59	6	11	8
20	59	9	7	3	61	3	0	0	62	8	7	3
21	62	9	5	9	64	3	9	0	65	10	2	9
22	65	9	4	4	67	4	6	0	68	11	10	4
23	68	9	2	11	70	5	3	0	72	1	5	11
24	71	9	1	6	73	6	0	0	75	3	1	6
25	74	9	0	0	76	6	9	0	78	4	9	0
26	77	8	10	7	79	7	6	0	81	6	4	7
27	80	8	9	2	82	8	3	0	84	8	0	2
28	83	8	7	9	85	9	0	0	87	9	7	9
29	86	8	6	3	88	9	9	0	90	11	3	3
30	89	8	4	10	91	10	6	0	94	0	10	10
31	92	8	3	5	94	11	3	0	97	2	6	5
32	95	8	2	0	98	0	0	0	100	4	2	0
33	98	8	0	6	101	0	9	0	103	5	9	6
34	101	7	11	1	104	1	6	0	106	7	5	1
35	104	7	9	8	107	2	3	0	109	9	0	8
36	107	7	8	3	110	3	0	0	112	10	8	3
37	110	7	6	9	113	3	9	0	116	0	3	9
38	113	7	5	4	116	4	6	0	119	1	11	4
39	116	7	3	11	119	5	3	0	122	3	6	11
40	119	7	2	6	122	6	0	0	125	5	2	6
80	239	2	5	0	245	0	0	0	250	10	5	0

Feet Long.	Side 21⅛ In.				Side 21¼ In.				Side 22 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	9	7	6	0	9	10	3	0	10	1	0
½	1	7	3	1	1	7	8	6	1	8	2	0
¾	2	4	10	8	2	5	6	9	2	6	3	0
1	3	2	6	3	3	3	5	0	3	4	4	0
2	6	5	0	6	6	6	10	1	6	8	8	0
3	9	7	6	9	9	10	3	2	10	1	0	0
4	12	10	1	0	13	1	8	3	13	5	4	0
5	16	0	7	3	16	5	1	3	16	9	8	0
6	19	3	1	6	19	8	6	4	20	2	0	0
7	22	5	7	9	22	11	11	5	23	6	4	0
8	25	8	2	0	26	3	4	6	26	10	8	0
9	28	10	8	3	29	6	9	6	30	3	0	0
10	32	1	2	6	32	10	2	7	33	7	4	0
11	35	3	8	9	36	1	7	8	36	11	8	0
12	38	6	3	0	39	5	0	9	40	4	0	0
13	41	8	9	3	42	8	5	9	43	8	4	0
14	44	11	3	6	45	11	10	10	47	0	8	0
15	48	1	9	9	49	3	3	11	50	5	0	0
16	51	4	4	0	52	6	9	0	53	9	4	0
17	54	6	10	3	55	10	2	0	57	1	8	0
18	57	9	4	6	59	1	7	1	60	6	0	0
19	60	11	10	9	62	5	0	2	63	10	4	0
20	64	2	5	0	65	8	5	3	67	2	8	0
21	67	4	11	3	68	11	10	3	70	7	0	0
22	70	7	5	6	72	3	3	4	73	11	4	0
23	73	9	11	9	75	6	8	5	77	3	8	0
24	77	0	6	0	78	10	1	6	80	8	0	0
25	80	3	0	3	82	1	6	6	84	0	4	0
26	83	5	6	6	85	4	11	7	87	4	8	0
27	86	8	0	9	88	8	4	8	90	9	0	0
28	89	10	7	0	91	11	9	9	94	1	4	0
29	93	1	1	3	95	3	2	9	97	5	8	0
30	96	3	7	6	98	6	7	10	100	10	0	0
31	99	6	1	9	101	10	0	11	104	2	4	0
32	102	8	8	0	105	1	6	0	107	6	8	0
33	105	11	2	3	108	4	11	0	110	11	0	0
34	109	1	8	6	111	8	4	1	114	3	4	0
35	112	4	2	9	114	11	9	2	117	7	8	0
36	115	6	9	0	118	3	2	3	121	0	0	0
37	118	9	3	3	121	6	7	3	124	4	4	0
38	121	11	9	6	124	10	0	4	127	8	8	0
39	125	2	3	9	128	1	5	5	131	1	0	0
40	128	4	10	0	131	4	10	6	134	5	4	0
80	256	9	8	0	262	9	9	0	268	10	8	0

Feet Long.	Side 22½ In.				Side 22⅔ In.				Side 22¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	10	3	9	0	10	6	6	0	10	9	4
½	1	8	7	6	1	9	1	1	1	9	6	9
¾	2	6	11	3	2	7	7	8	2	8	4	2
1	3	5	3	0	3	6	2	3	3	7	1	6
2	6	10	6	1	7	0	4	6	7	2	3	1
3	10	3	9	2	10	6	6	9	10	9	4	8
4	13	9	0	3	14	0	9	0	14	4	6	3
5	17	2	3	3	17	6	11	3	17	11	7	9
6	20	7	6	4	21	1	1	6	21	6	9	4
7	24	0	9	5	24	7	3	9	25	1	10	11
8	27	6	0	6	28	1	6	0	28	9	0	6
9	30	11	3	6	31	7	8	3	32	4	2	0
10	34	4	6	7	35	1	10	6	35	11	3	7
11	37	9	9	8	38	8	0	9	39	6	5	2
12	41	3	0	9	42	2	3	0	43	1	6	9
13	44	8	3	9	45	8	5	3	46	8	8	3
14	48	1	6	10	49	2	7	6	50	3	9	10
15	51	6	9	11	52	8	9	9	53	10	11	5
16	55	0	1	0	56	3	0	0	57	6	1	0
17	58	5	4	0	59	9	2	3	61	1	2	6
18	61	10	7	1	63	3	4	6	64	8	4	1
19	65	3	10	2	66	9	6	9	68	3	5	8
20	68	9	1	3	70	3	9	0	71	10	7	3
21	72	2	4	3	73	9	11	3	75	5	8	9
22	75	7	7	4	77	4	1	6	79	0	10	4
23	79	0	10	5	80	10	3	9	82	7	11	11
24	82	6	1	6	84	4	6	0	86	3	1	6
25	85	11	4	6	87	10	8	3	89	10	3	0
26	89	4	7	7	91	4	10	6	93	5	4	7
27	92	9	10	8	94	11	0	9	97	0	6	2
28	96	3	1	9	98	5	3	0	100	7	7	9
29	99	8	4	9	101	11	5	3	104	2	9	3
30	103	1	7	10	105	5	7	6	107	9	10	10
31	106	6	10	11	108	11	9	9	111	5	0	5
32	110	0	2	0	112	6	0	0	115	0	2	0
33	113	5	5	0	116	0	2	3	118	7	3	6
34	116	10	8	1	119	6	4	6	122	2	5	1
35	120	3	11	2	123	0	6	9	125	9	6	8
36	123	9	2	3	126	6	9	0	129	4	8	3
37	127	2	5	3	130	0	11	3	132	11	9	9
38	130	7	8	4	133	7	1	6	136	6	11	4
39	134	0	11	5	137	1	3	9	140	2	0	11
40	137	6	2	6	140	7	6	0	143	9	2	6
80	275	0	5	0	281	3	0	0	287	6	5	0

Feet Long.	Side 23 In.				Side 23¼ In.				Side 23½ In.			
	Ft.	In.	Pts.	2ds	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	0	11	0	3	0	11	3	1	0	11	6	0
½	1	10	0	6	1	10	6	3	1	11	0	1
¾	2	9	0	9	2	9	9	5	2	10	6	2
1	3	8	1	0	3	9	0	6	3	10	0	3
2	7	4	2	0	7	6	1	1	7	8	0	6
3	11	0	3	0	11	3	1	8	11	6	0	9
4	14	8	4	0	15	0	2	3	15	4	1	0
5	18	4	5	0	18	9	2	9	19	2	1	3
6	22	0	6	0	22	6	3	4	23	0	1	6
7	25	8	7	0	26	3	3	11	26	10	1	9
8	29	4	8	0	30	0	4	6	30	8	2	0
9	33	0	9	0	33	9	5	0	34	6	2	3
10	36	8	10	0	37	6	5	7	38	4	2	6
11	40	4	11	0	41	3	6	2	42	2	2	9
12	44	1	0	0	45	0	6	9	46	0	3	0
13	47	9	1	0	48	9	7	3	49	10	3	3
14	51	5	2	0	52	6	7	10	53	8	3	6
15	55	1	3	0	56	3	8	5	57	6	3	9
16	58	9	4	0	60	0	9	0	61	4	4	0
17	62	5	5	0	63	9	9	6	65	2	4	3
18	66	1	6	0	67	6	10	1	69	0	4	6
19	69	9	7	0	71	3	10	8	72	10	4	9
20	73	5	8	0	75	0	11	3	76	8	5	0
21	77	1	9	0	78	9	11	9	80	6	5	3
22	80	9	10	0	82	7	0	4	84	4	5	6
23	84	5	11	0	86	4	0	11	88	2	5	9
24	88	2	0	0	90	1	1	6	92	0	6	0
25	91	10	1	0	93	10	2	0	95	10	6	3
26	95	6	2	0	97	7	2	7	99	8	6	6
27	99	2	3	0	101	4	3	2	103	6	6	9
28	102	10	4	0	105	1	3	9	107	4	7	0
29	106	6	5	0	108	10	4	3	111	2	7	3
30	110	2	6	0	112	7	4	10	115	0	7	6
31	113	10	7	0	116	4	5	5	118	10	7	9
32	117	6	8	0	120	1	6	0	122	8	8	0
33	121	2	9	0	123	10	6	6	126	6	8	3
34	124	10	10	0	127	7	7	1	130	4	8	6
35	128	6	11	0	131	4	7	8	134	2	8	9
36	132	3	0	0	135	1	8	3	138	0	9	0
37	135	11	1	0	138	10	8	9	141	10	9	3
38	139	7	2	0	142	7	9	4	145	8	9	6
39	143	3	3	0	146	4	9	11	149	6	9	9
40	146	11	4	0	150	1	10	6	153	4	10	0
80	293	10	8	0	300	3	9	0	306	9	8	0

Feet Long.	Side 23¾ In.				Side 24 In.				Side 24¼ In.			
	Ft	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In	Pts.	2ds.
¼	0	11	9	0	1	0	0	0	1	0	3	0
½	1	11	6	0	2	0	0	0	2	0	6	0
¾	2	11	3	0	3	0	0	0	3	0	9	0
1	3	11	0	0	4	0	0	0	4	1	0	0
2	7	10	0	1	8	0	0	0	8	2	0	1
3	11	9	0	2	12	0	0	0	12	3	0	2
4	15	8	0	3	16	0	0	0	16	4	0	3
5	19	7	0	3	20	0	0	0	20	5	0	3
6	23	6	0	4	24	0	0	0	24	6	0	4
7	27	5	0	5	28	0	0	0	28	7	0	5
8	31	4	0	6	32	0	0	0	32	8	0	6
9	35	3	0	6	36	0	0	0	36	9	0	6
10	39	2	0	7	40	0	0	0	40	10	0	7
11	43	1	0	8	44	0	0	0	44	11	0	8
12	47	0	0	9	48	0	0	0	49	0	0	9
13	50	11	0	9	52	0	0	0	53	1	0	9
14	54	10	0	10	56	0	0	0	57	2	0	10
15	58	9	0	11	60	0	0	0	61	3	0	11
16	62	8	1	0	64	0	0	0	65	4	1	0
17	66	7	1	0	68	0	0	0	69	5	1	0
18	70	6	1	1	72	0	0	0	73	6	1	1
19	74	5	1	2	76	0	0	0	77	7	1	2
20	78	4	1	3	80	0	0	0	81	8	1	3
21	82	3	1	3	84	0	0	0	85	9	1	3
22	86	2	1	4	88	0	0	0	89	10	1	4
23	90	1	1	5	92	0	0	0	93	11	1	5
24	94	0	1	6	96	0	0	0	98	0	1	6
25	97	11	1	6	100	0	0	0	102	1	1	6
26	101	10	1	7	104	0	0	0	106	2	1	7
27	105	9	1	8	108	0	0	0	110	3	1	8
28	109	8	1	9	112	0	0	0	114	4	1	9
29	113	7	1	9	116	0	0	0	118	5	1	9
30	117	6	1	10	120	0	0	0	122	6	1	10
31	121	5	1	11	124	0	0	0	126	7	1	11
32	125	4	2	0	128	0	0	0	130	8	2	0
33	129	3	2	0	132	0	0	0	134	9	2	0
34	133	2	2	1	136	0	0	0	138	10	2	1
35	137	1	2	2	140	0	0	0	142	11	2	2
36	141	0	2	3	144	0	0	0	147	0	2	3
37	144	11	2	3	148	0	0	0	151	1	2	3
38	148	10	2	4	152	0	0	0	155	2	2	4
39	152	9	2	5	156	0	0	0	159	3	2	5
40	156	8	2	6	160	0	0	0	163	4	2	6
80	313	4	5	0	320	0	0	0	326	8	5	0

Feet Long.	Side 24½ In.				Side 24¾ In.				Side 25 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	0	6	0	1	0	9	1	1	1	0	3
½	2	1	0	1	2	1	6	3	2	2	0	6
¾	3	1	6	2	3	2	3	5	3	3	0	9
1	4	2	0	3	4	3	0	6	4	4	1	0
2	8	4	0	6	8	6	1	1	8	8	2	0
3	12	6	0	9	12	9	1	8	13	0	3	0
4	16	8	1	0	17	0	2	3	17	4	4	0
5	20	10	1	3	21	3	2	9	21	8	5	0
6	25	0	1	6	25	6	3	4	26	0	6	0
7	29	2	1	9	29	9	3	11	30	4	7	0
8	33	4	2	0	34	0	4	6	34	8	8	0
9	37	6	2	3	38	3	5	0	39	0	9	0
10	41	8	2	6	42	6	5	7	43	4	10	0
11	45	10	2	9	46	9	6	2	47	8	11	0
12	50	0	3	0	51	0	6	9	52	1	0	0
13	54	2	3	3	55	3	7	3	56	5	1	0
14	58	4	3	6	59	6	7	10	60	9	2	0
15	62	6	3	9	63	9	8	5	65	1	3	0
16	66	8	4	0	68	0	9	0	69	5	4	0
17	70	10	4	3	72	3	9	6	73	9	5	0
18	75	0	4	6	76	6	10	1	78	1	6	0
19	79	2	4	9	80	9	10	8	82	5	7	0
20	83	4	5	0	85	0	11	3	86	9	8	0
21	87	6	5	3	89	3	11	9	91	1	9	0
22	91	8	5	6	93	7	0	4	95	5	10	0
23	95	10	5	9	97	10	0	11	99	9	11	0
24	100	0	6	0	102	1	1	6	104	2	0	0
25	104	2	6	3	106	4	2	0	108	6	1	0
26	108	4	6	6	110	7	2	7	112	10	2	0
27	112	6	6	9	114	10	3	2	117	2	3	0
28	116	8	7	0	119	1	3	9	121	6	4	0
29	120	10	7	3	123	4	4	3	125	10	5	0
30	125	0	7	6	127	7	4	10	130	2	6	0
31	129	2	7	9	131	10	5	5	134	6	7	0
32	133	4	8	0	136	1	6	0	138	10	8	0
33	137	6	8	3	140	4	6	6	143	2	9	0
34	141	8	8	6	144	7	7	1	147	6	10	0
35	145	10	8	9	148	10	7	8	151	10	11	0
36	150	0	9	0	153	1	8	3	156	3	0	0
37	154	2	9	3	157	4	8	9	160	7	1	0
38	158	4	9	6	161	7	9	4	164	11	2	0
39	162	6	9	9	165	10	9	11	169	3	3	0
40	166	8	10	0	170	1	10	6	173	7	4	0
80	333	5	8	0	340	3	9	0	347	2	8	0

Feet Long.	Side 25¼ In.				Side 25⅓ In.				Side 25¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	1	3	4	1	1	6	6	1	1	9	9
½	2	2	6	9	2	3	1	1	2	3	7	6
¾	3	3	10	2	3	4	7	8	3	5	5	3
1	4	5	1	6	4	6	2	3	4	7	3	0
2	8	10	3	1	9	0	4	6	9	2	6	1
3	13	3	4	8	13	6	6	9	13	9	9	2
4	17	8	6	3	18	0	9	0	18	5	0	3
5	22	1	7	9	22	6	11	3	23	0	3	3
6	26	6	9	4	27	1	1	6	27	7	6	4
7	30	11	10	11	31	7	3	9	32	2	9	5
8	35	5	0	6	36	1	6	0	36	10	0	6
9	39	10	2	0	40	7	8	3	41	5	3	6
10	44	3	3	7	45	1	10	6	46	0	6	7
11	48	8	5	2	49	8	0	9	50	7	9	8
12	53	1	6	9	54	2	3	0	55	3	0	9
13	57	6	8	3	58	8	5	3	59	10	3	9
14	61	11	9	10	63	2	7	6	64	5	6	10
15	66	4	11	5	67	8	9	9	69	0	9	11
16	70	10	1	0	72	3	0	0	73	8	1	0
17	75	3	2	6	76	9	2	3	78	3	4	0
18	79	8	4	1	81	3	4	6	82	10	7	1
19	84	1	5	8	85	9	6	9	87	5	10	2
20	88	6	7	3	90	3	9	0	92	1	1	3
21	92	11	8	9	94	9	11	3	96	8	4	3
22	97	4	10	4	99	4	1	6	101	3	7	4
23	101	9	11	11	103	10	3	9	105	10	10	5
24	106	3	1	6	108	4	6	0	110	6	1	6
25	110	8	3	0	112	10	8	3	115	1	4	6
26	115	1	4	7	117	4	10	6	119	8	7	7
27	119	6	6	2	121	11	0	9	124	3	10	8
28	123	11	7	9	126	5	3	0	128	11	1	9
29	128	4	9	3	130	11	5	3	133	6	4	9
30	132	9	10	10	135	5	7	6	138	1	7	10
31	137	3	0	5	139	11	9	9	142	8	10	11
32	141	8	2	0	144	6	0	0	147	4	2	0
33	146	1	3	6	149	0	2	3	151	11	5	0
34	150	6	5	1	153	6	4	6	156	6	8	1
35	154	11	6	8	158	0	6	9	161	1	11	2
36	159	4	8	3	162	6	9	0	165	9	2	3
37	163	9	9	9	167	0	11	3	170	4	5	3
38	168	2	11	4	171	7	1	6	174	11	8	4
39	172	8	0	11	176	1	3	9	179	6	11	5
40	177	1	2	6	180	7	6	0	184	2	2	6
80	354	2	5	0	361	3	0	0	368	4	5	0

Feet Long.	Side 26 In.				Side 26¼ In.				Side 26½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	2	1	0	1	2	4	3	1	2	7	6
½	2	4	2	0	2	4	8	6	2	5	3	1
¾	3	6	3	0	3	7	0	9	3	7	10	8
1	4	8	4	0	4	9	5	0	4	10	6	3
2	9	4	8	0	9	6	10	1	9	9	0	6
3	14	1	0	0	14	4	3	2	14	7	6	9
4	18	9	4	0	19	1	8	3	19	6	1	0
5	23	5	8	0	23	11	1	3	24	4	7	3
6	28	2	0	0	28	8	6	4	29	3	1	6
7	32	10	4	0	33	5	11	5	34	1	7	9
8	37	6	8	0	38	3	4	6	39	0	2	0
9	42	3	0	0	43	0	9	6	43	10	8	3
10	46	11	4	0	47	10	2	7	48	9	2	6
11	51	7	8	0	52	7	7	8	53	7	8	9
12	56	4	0	0	57	5	0	9	58	6	3	0
13	61	0	4	0	62	2	5	9	63	4	9	3
14	65	8	8	0	66	11	10	10	68	3	3	6
15	70	5	0	0	71	9	3	11	73	1	9	9
16	75	1	4	0	76	6	9	0	78	0	4	0
17	79	9	8	0	81	4	2	0	82	10	10	3
18	84	6	0	0	86	1	7	1	87	9	4	6
19	89	2	4	0	90	11	0	2	92	7	10	9
20	93	10	8	0	95	8	5	3	97	6	5	0
21	98	7	0	0	100	5	10	3	102	4	11	3
22	103	3	4	0	105	3	3	4	107	3	5	6
23	107	11	8	0	110	0	8	5	112	1	11	9
24	112	8	0	0	114	10	1	6	117	0	6	0
25	117	4	4	0	119	7	6	6	121	11	0	3
26	122	0	8	0	124	4	11	7	126	9	6	6
27	126	9	0	0	129	2	4	8	131	8	0	9
28	131	5	4	0	133	11	9	9	136	6	7	0
29	136	1	8	0	138	9	2	9	141	5	1	3
30	140	10	0	0	143	6	7	10	146	3	7	6
31	145	6	4	0	148	4	0	11	151	2	1	9
32	150	2	8	0	153	1	6	0	156	0	8	0
33	154	11	0	0	157	10	11	0	160	11	2	3
34	159	7	4	0	162	8	4	1	165	9	8	6
35	164	3	8	0	167	5	9	2	170	8	2	9
36	169	0	0	0	172	3	2	3	175	6	9	0
37	173	8	4	0	177	0	7	3	180	5	3	3
38	178	4	8	0	181	10	0	4	185	3	9	6
39	183	1	0	0	186	7	5	5	190	2	3	9
40	187	9	4	0	191	4	10	6	195	0	10	0
80	375	6	8	0	382	9	9	0	390	1	8	0

Feet Long.	Side 26¾ In.				Side 27 In.				Side 27¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	2	10	10	1	3	2	3	1	3	5	7
½	2	5	9	9	2	6	4	6	2	6	11	3
¾	3	8	8	8	3	9	6	9	3	10	4	11
1	4	11	7	6	5	0	9	0	5	1	10	6
2	9	11	3	1	10	1	6	0	10	3	9	1
3	14	10	10	8	15	2	3	0	15	5	7	8
4	19	10	6	3	20	3	0	0	20	7	6	3
5	24	10	1	9	25	3	9	0	25	9	4	9
6	29	9	9	4	30	4	6	0	30	11	3	4
7	34	9	4	11	35	5	3	0	36	1	1	11
8	39	9	0	6	40	6	0	0	41	3	0	6
9	44	8	8	0	45	6	9	0	46	4	11	0
10	49	8	3	7	50	7	6	0	51	6	9	7
11	54	7	11	2	55	8	3	0	56	8	8	2
12	59	7	6	9	60	9	0	0	61	10	6	9
13	64	7	2	3	65	9	9	0	67	0	5	3
14	69	6	9	10	70	10	6	0	72	2	3	10
15	74	6	5	5	75	11	3	0	77	4	2	5
16	79	6	1	0	81	0	0	0	82	6	1	0
17	84	5	8	6	86	0	9	0	87	7	11	6
18	89	5	4	1	91	1	6	0	92	9	10	1
19	94	4	11	8	96	2	3	0	97	11	8	8
20	99	4	7	3	101	3	0	0	103	1	7	3
21	104	4	2	9	106	3	9	0	108	3	5	9
22	109	3	10	4	111	4	6	0	113	5	4	4
23	114	3	5	11	116	5	3	0	118	7	2	11
24	119	3	1	6	121	6	0	0	123	9	1	6
25	124	2	9	0	126	6	9	0	128	11	0	0
26	129	2	4	7	131	7	6	0	134	0	10	7
27	134	2	0	2	136	8	3	0	139	2	9	2
28	139	1	7	9	141	9	0	0	144	4	7	9
29	144	1	3	3	146	9	9	0	149	6	6	3
30	149	0	10	10	151	10	6	0	154	8	4	10
31	154	0	6	5	156	11	3	0	159	10	3	5
32	159	0	2	0	162	0	0	0	165	0	2	0
33	163	11	9	6	167	0	9	0	170	2	0	6
34	168	11	5	1	172	1	6	0	175	3	11	1
35	173	11	0	8	177	2	3	0	180	5	9	8
36	178	10	8	3	182	3	0	0	185	7	8	3
37	183	10	3	9	187	3	9	0	190	9	6	9
38	188	9	11	4	192	4	6	0	195	11	5	4
39	193	9	6	11	197	5	3	0	201	1	3	11
40	198	9	2	6	202	6	0	0	206	3	2	6
80	397	6	5	0	405	0	0	0	412	6	5	0

Feet Long.	Side 27½ In.				Side 27⅞ In.				Side 28 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	3	9	0	1	4	0	6	1	4	4	0
½	2	7	6	1	2	8	1	0	2	8	8	0
¾	3	11	3	2	4	0	1	6	4	1	0	0
1	5	3	0	3	5	4	2	0	5	5	4	0
2	10	6	0	6	10	8	4	1	10	10	8	0
3	15	9	0	9	16	0	6	2	16	4	0	0
4	21	0	1	0	21	4	8	3	21	9	4	0
5	26	3	1	3	26	8	10	3	27	2	8	0
6	31	6	1	6	32	1	0	4	32	8	0	0
7	36	9	1	9	37	5	2	5	38	1	4	0
8	42	0	2	0	42	9	4	6	43	6	8	0
9	47	3	2	3	48	1	6	6	49	0	0	0
10	52	6	2	6	53	5	8	7	54	5	4	0
11	57	9	2	9	58	9	10	8	59	10	8	0
12	63	0	3	0	64	2	0	9	65	4	0	0
13	68	3	3	3	69	6	2	9	70	9	4	0
14	73	6	3	6	74	10	4	10	76	2	8	0
15	78	9	3	9	80	2	6	11	81	8	0	0
16	84	0	4	0	85	6	9	0	87	1	4	0
17	89	3	4	3	90	10	11	0	92	6	8	0
18	94	6	4	6	96	3	1	1	98	0	0	0
19	99	9	4	9	101	7	3	2	103	5	4	0
20	105	0	5	0	106	11	5	3	108	10	8	0
21	110	3	5	3	112	3	7	3	114	4	0	0
22	115	6	5	6	117	7	9	4	119	9	4	0
23	120	9	5	9	122	11	11	5	125	2	8	0
24	126	0	6	0	128	4	1	6	130	8	0	0
25	131	3	6	3	133	8	3	6	136	1	4	0
26	136	6	6	6	139	0	5	7	141	6	8	0
27	141	9	6	9	144	4	7	8	147	0	0	0
28	147	0	7	0	149	8	9	9	152	5	4	0
29	152	3	7	3	155	0	11	9	157	10	8	0
30	157	6	7	6	160	5	1	10	163	4	0	0
31	162	9	7	9	165	9	3	11	168	9	4	0
32	168	0	8	0	171	1	6	0	174	2	8	0
33	173	3	8	3	176	5	8	0	179	8	0	0
34	178	6	8	6	181	9	10	1	185	1	4	0
35	183	9	8	9	187	2	0	2	190	6	8	0
36	189	0	9	0	192	6	2	3	196	0	0	0
37	194	3	9	3	197	10	4	3	201	5	4	0
38	199	6	9	6	203	2	6	4	206	10	8	0
39	204	9	9	9	208	6	8	5	212	4	0	0
40	210	0	10	0	213	10	10	6	217	9	4	0
80	420	1	8	0	427	9	9	0	435	6	8	0

Feet Long.	Side 28¼ In.				Side 28½ In.				Side 28¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	4	7	6	1	4	11	0	1	5	2	7
½	2	9	3	0	2	9	10	1	2	10	5	3
¾	4	1	10	6	4	2	9	2	4	3	7	11
1	5	6	6	0	5	7	8	3	5	8	10	6
2	11	1	0	1	11	3	4	6	11	5	9	1
3	16	7	6	2	16	11	0	9	17	2	7	8
4	22	2	0	3	22	6	9	0	22	11	6	3
5	27	8	6	3	28	2	5	3	28	8	4	9
6	33	3	0	4	33	10	1	6	34	5	3	4
7	38	9	6	5	39	5	9	9	40	2	1	11
8	44	4	0	6	45	1	6	0	45	11	0	6
9	49	10	6	6	50	9	2	3	51	7	11	0
10	55	5	0	7	56	4	10	6	57	4	9	7
11	60	11	6	8	62	0	6	9	63	1	8	2
12	66	6	0	9	67	8	3	0	68	10	6	9
13	72	0	6	9	73	3	11	3	74	7	5	3
14	77	7	0	10	78	11	7	6	80	4	3	10
15	83	1	6	11	84	7	3	9	86	1	2	5
16	88	8	1	0	90	3	0	0	91	10	1	0
17	94	2	7	0	95	10	8	3	97	6	11	6
18	99	9	1	1	101	6	4	6	103	3	10	1
19	105	3	7	2	107	2	0	9	109	0	8	8
20	110	10	1	3	112	9	9	0	114	9	7	3
21	116	4	7	3	118	5	5	3	120	6	5	9
22	121	11	1	4	124	1	1	6	126	3	4	4
23	127	5	7	5	129	8	9	9	132	0	2	11
24	133	0	1	6	135	4	6	0	137	9	1	6
25	138	6	7	6	141	0	2	3	143	6	0	0
26	144	1	1	7	146	7	10	6	149	2	10	7
27	149	7	7	8	152	3	6	9	154	11	9	2
28	155	2	1	9	157	11	3	0	160	8	7	9
29	160	8	7	9	163	6	11	3	166	5	6	3
30	166	3	1	10	169	2	7	6	172	2	4	10
31	171	9	7	11	174	10	3	9	177	11	3	5
32	177	4	2	0	180	6	0	0	183	8	2	0
33	182	10	8	0	186	1	8	3	189	5	0	6
34	188	5	2	1	191	9	4	6	195	1	11	1
35	193	11	8	2	197	5	0	9	200	10	9	8
36	199	6	2	3	203	0	9	0	206	7	8	3
37	205	0	8	3	208	8	5	3	212	4	6	9
38	210	7	2	4	214	4	1	6	218	1	5	4
39	216	1	8	5	219	11	9	9	223	10	3	11
40	221	8	2	6	225	7	6	0	229	7	2	6
80	443	4	5	0	451	3	0	0	459	2	5	0

Feet Long.	Side 29 In.				Side 29½ In.				Side 29⅓ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	5	6	3	1	5	9	10	1	6	1	6
½	2	11	0	6	2	11	7	9	3	0	3	1
¾	4	4	6	9	4	5	5	8	4	6	4	8
1	5	10	1	0	5	11	3	6	6	0	6	3
2	11	8	2	0	11	10	7	1	12	1	0	6
3	17	6	3	0	17	9	10	8	18	1	6	9
4	23	4	4	0	23	9	2	3	24	2	1	0
5	29	2	5	0	29	8	5	9	30	2	7	3
6	35	0	6	0	35	7	9	4	36	3	1	6
7	40	10	7	0	41	7	0	11	42	3	7	9
8	46	8	8	0	47	6	4	6	48	4	2	0
9	52	6	9	0	53	5	8	0	54	4	8	3
10	58	4	10	0	59	4	11	7	60	5	2	6
11	64	2	11	0	65	4	3	2	66	5	8	9
12	70	1	0	0	71	3	6	9	72	6	3	0
13	75	11	1	0	77	2	10	3	78	6	9	3
14	81	9	2	0	83	2	1	10	84	7	3	6
15	87	7	3	0	89	1	5	5	90	7	9	9
16	93	5	4	0	95	0	9	0	96	8	4	0
17	99	3	5	0	101	0	0	6	102	8	10	3
18	105	1	6	0	106	11	4	1	108	9	4	6
19	110	11	7	0	112	10	7	8	114	9	10	9
20	116	9	8	0	118	9	11	3	120	10	5	0
21	122	7	9	0	124	9	2	9	126	10	11	3
22	128	5	10	0	130	8	6	4	132	11	5	6
23	134	3	11	0	136	7	9	11	138	11	11	9
24	140	2	0	0	142	7	1	6	145	0	6	0
25	146	0	1	0	148	6	5	0	151	1	0	3
26	151	10	2	0	154	5	8	7	157	1	6	6
27	157	8	3	0	160	5	0	2	163	2	0	9
28	163	6	4	0	166	4	3	9	169	2	7	0
29	169	4	5	0	172	3	7	3	175	3	1	3
30	175	2	6	0	178	2	10	10	181	3	7	6
31	181	0	7	0	184	2	2	5	187	4	1	9
32	186	10	8	0	190	1	6	0	193	4	8	0
33	192	8	9	0	196	0	9	6	199	5	2	3
34	198	6	10	0	202	0	1	1	205	5	8	6
35	204	4	11	0	207	11	4	8	211	6	2	9
36	210	3	0	0	213	10	8	3	217	6	9	0
37	216	1	1	0	219	9	11	9	223	7	3	3
38	221	11	2	0	225	9	3	4	229	7	9	6
39	227	9	3	0	231	8	6	11	235	8	3	9
40	233	7	4	0	237	7	10	6	241	8	10	0
80	467	2	8	0	475	3	9	0	483	5	8	0

Feet Long.	Side 29¾ In.				Side 30 In.				Side 30¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	6	5	3	1	6	9	0	1	7	0	9
½	3	0	10	6	3	1	6	0	3	2	1	6
¾	4	7	3	9	4	8	3	0	4	9	2	3
1	6	1	9	0	6	3	0	0	6	4	3	0
2	12	3	6	1	12	6	0	0	12	8	6	1
3	18	5	3	2	18	9	0	0	19	0	9	2
4	24	7	0	3	25	0	0	0	25	5	0	3
5	30	8	9	3	31	3	0	0	31	9	3	3
6	36	10	6	4	37	6	0	0	38	1	6	4
7	43	0	3	5	43	9	0	0	44	5	9	5
8	49	2	0	6	50	0	0	0	50	10	0	6
9	55	3	9	6	56	3	0	0	57	2	3	6
10	61	5	6	7	62	6	0	0	63	6	6	7
11	67	7	3	8	68	9	0	0	69	10	9	8
12	73	9	0	9	75	0	0	0	76	3	0	9
13	79	10	9	9	81	3	0	0	82	7	3	9
14	86	0	6	10	87	6	0	0	88	11	6	10
15	92	2	3	11	93	9	0	0	95	3	9	11
16	98	4	1	0	100	0	0	0	101	8	1	0
17	104	5	10	0	106	3	0	0	108	0	4	0
18	110	7	7	1	112	6	0	0	114	4	7	1
19	116	9	4	2	118	9	0	0	120	8	10	2
20	122	11	1	3	125	0	0	0	127	1	1	3
21	129	0	10	3	131	3	0	0	133	5	4	3
22	135	2	7	4	137	6	0	0	139	9	7	4
23	141	4	4	5	143	9	0	0	146	1	10	5
24	147	6	1	6	150	0	0	0	152	6	1	6
25	153	7	10	6	156	3	0	0	158	10	4	6
26	159	9	7	7	162	6	0	0	165	2	7	7
27	165	11	4	8	168	9	0	0	171	6	10	8
28	172	1	1	9	175	0	0	0	177	11	1	9
29	178	2	10	9	181	3	0	0	184	3	4	9
30	184	4	7	10	187	6	0	0	190	7	7	10
31	190	6	4	11	193	9	0	0	196	11	10	11
32	196	8	2	0	200	0	0	0	203	4	2	0
33	202	9	11	0	206	3	0	0	209	8	5	0
34	208	11	8	1	212	6	0	0	216	0	8	1
35	215	1	5	2	218	9	0	0	222	4	11	2
36	221	3	2	3	225	0	0	0	228	9	2	3
37	227	4	11	3	231	3	0	0	235	1	5	3
38	233	6	8	4	237	6	0	0	241	5	8	4
39	239	8	5	5	243	9	0	0	247	9	11	5
40	245	10	2	6	250	0	0	0	254	2	2	6
80	491	8	5	0	500	0	0	0	508	4	5	0

Feet Long.	Side 30½ In.				Side 30⅝ In.				Side 31 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	7	4	6	1	7	8	4	1	8	0	3
½	3	2	9	1	3	3	4	9	3	4	0	6
¾	4	10	1	8	4	11	1	2	5	0	0	9
1	6	5	6	3	6	6	9	6	6	8	1	0
2	12	11	0	6	13	1	7	1	13	4	2	0
3	19	4	6	9	19	8	4	8	20	0	3	0
4	25	10	1	0	26	3	2	3	26	8	4	0
5	32	3	7	3	32	9	11	9	33	4	5	0
6	38	9	1	6	39	4	9	4	40	0	6	0
7	45	2	7	9	45	11	6	11	46	8	7	0
8	51	8	2	0	52	6	4	6	53	4	8	0
9	58	1	8	3	59	1	2	0	60	0	9	0
10	64	7	2	6	65	7	11	7	66	8	10	0
11	71	0	8	9	72	2	9	2	73	4	11	0
12	77	6	3	0	78	9	6	9	80	1	0	0
13	83	11	9	3	85	4	4	3	86	9	1	0
14	90	5	3	6	91	11	1	10	93	5	2	0
15	96	10	9	9	98	5	11	5	100	1	3	0
16	103	4	4	0	105	0	9	0	106	9	4	0
17	109	9	10	3	111	7	6	6	113	5	5	0
18	116	3	4	6	118	2	4	1	120	1	6	0
19	122	8	10	9	124	9	1	8	126	9	7	0
20	129	2	5	0	131	3	11	3	133	5	8	0
21	135	7	11	3	137	10	8	9	140	1	9	0
22	142	1	5	6	144	5	6	4	146	9	10	0
23	148	6	11	9	151	0	3	11	153	5	11	0
24	155	0	6	0	157	7	1	6	160	2	0	0
25	161	6	0	3	164	1	11	0	166	10	1	0
26	167	11	6	6	170	8	8	7	173	6	2	0
27	174	5	0	9	177	3	6	2	180	2	3	0
28	180	10	7	0	183	10	3	9	186	10	4	0
29	187	4	1	3	190	5	1	3	193	6	5	0
30	193	9	7	6	196	11	10	10	200	2	6	0
31	200	3	1	9	203	6	8	5	206	10	7	0
32	206	8	8	0	210	1	6	0	213	6	8	0
33	213	2	2	3	216	8	3	6	220	2	9	0
34	219	7	8	6	223	3	1	1	226	10	10	0
35	226	1	2	9	229	9	10	8	233	6	11	0
36	232	6	9	0	236	4	8	3	240	3	0	0
37	239	0	3	3	242	11	5	9	246	11	1	0
38	245	5	9	6	249	6	3	4	253	7	2	0
39	251	11	3	9	256	1	0	11	260	3	3	0
40	258	4	10	0	262	7	10	6	266	11	4	0
80	516	9	8	0	525	3	9	0	533	10	8	0

Feet Long.	Side 31½ In.				Side 31⅓ In.				Side 31¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds	Ft.	In.	Pts.	2ds.
¼	1	8	4	1	1	8	8	0	1	9	0	0
½	3	4	8	3	3	5	4	1	3	6	0	0
¾	5	1	0	5	5	2	0	2	5	3	0	0
1	6	9	4	6	6	10	8	3	7	0	0	0
2	13	6	9	1	13	9	4	6	14	0	0	1
3	20	4	1	8	20	8	0	9	21	0	0	2
4	27	1	6	3	27	6	9	0	28	0	0	3
5	33	10	10	9	34	5	5	3	35	0	0	3
6	40	8	3	4	41	4	1	6	42	0	0	4
7	47	5	7	11	48	2	9	9	49	0	0	5
8	54	3	0	6	55	1	6	0	56	0	0	6
9	61	0	5	0	62	0	2	3	63	0	0	6
10	67	9	9	7	68	10	10	6	70	0	0	7
11	74	7	2	2	75	9	6	9	77	0	0	8
12	81	4	6	9	82	8	3	0	84	0	0	9
13	88	1	11	3	89	6	11	3	91	0	0	9
14	94	11	3	10	96	5	7	6	98	0	0	10
15	101	8	8	5	103	4	3	9	105	0	0	11
16	108	6	1	0	110	3	0	0	112	0	1	0
17	115	3	5	6	117	1	8	3	119	0	1	0
18	122	0	10	1	124	0	4	6	126	0	1	1
19	128	10	2	8	130	11	0	9	133	0	1	2
20	135	7	7	3	137	9	9	0	140	0	1	3
21	142	4	11	9	144	8	5	3	147	0	1	3
22	149	2	4	4	151	7	1	6	154	0	1	4
23	155	11	8	11	158	5	9	9	161	0	1	5
24	162	9	1	6	165	4	6	0	168	0	1	6
25	169	6	6	0	172	3	2	3	175	0	1	6
26	176	3	10	7	179	1	10	6	182	0	1	7
27	183	1	3	2	186	0	6	9	189	0	1	8
28	189	10	7	9	192	11	3	0	196	0	1	9
29	196	8	0	3	199	9	11	3	203	0	1	9
30	203	5	4	10	206	8	7	6	210	0	1	10
31	210	2	9	5	213	7	3	9	217	0	1	11
32	217	0	2	0	220	6	0	0	224	0	2	0
33	223	9	6	6	227	4	8	3	231	0	2	0
34	230	6	11	1	234	3	4	6	238	0	2	1
35	237	4	3	8	241	2	0	9	245	0	2	2
36	244	1	8	3	248	0	9	0	252	0	2	3
37	250	11	0	9	254	11	5	3	259	0	2	3
38	257	8	5	4	261	10	1	6	266	0	2	4
39	264	5	9	11	268	8	9	9	273	0	2	5
40	271	3	2	6	275	7	6	0	280	0	2	6
80	542	6	5	0	551	3	0	0	560	0	5	0

Feet Long.	Side 32 In.				Side 32¼ In.				Side 32½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	9	4	0	1	9	8	0	1	10	0	0
½	3	6	8	0	3	7	4	0	3	8	0	1
¾	5	4	0	0	5	5	0	0	5	6	0	2
1	7	1	4	0	7	2	8	0	7	4	0	3
2	14	2	8	0	14	5	4	1	14	8	0	6
3	21	4	0	0	21	8	0	2	22	0	0	9
4	28	5	4	0	28	10	8	3	29	4	1	0
5	35	6	8	0	36	1	4	3	36	8	1	3
6	42	8	0	0	43	4	0	4	44	0	1	6
7	49	9	4	0	50	6	8	5	51	4	1	9
8	56	10	8	0	57	9	4	6	58	8	2	0
9	64	0	0	0	65	0	0	6	66	0	2	3
10	71	1	4	0	72	2	8	7	73	4	2	6
11	78	2	8	0	79	5	4	8	80	8	2	9
12	85	4	0	0	86	8	0	9	88	0	3	0
13	92	5	4	0	93	10	8	9	95	4	3	3
14	99	6	8	0	101	1	4	10	102	8	3	6
15	106	8	0	0	108	4	0	11	110	0	3	9
16	113	9	4	0	115	6	9	0	117	4	4	0
17	120	10	8	0	122	9	5	0	124	8	4	3
18	128	0	0	0	130	0	1	1	132	0	4	6
19	135	1	4	0	137	2	9	2	139	4	4	9
20	142	2	8	0	144	5	5	3	146	8	5	0
21	149	4	0	0	151	8	1	3	154	0	5	3
22	156	5	4	0	158	10	9	4	161	4	5	6
23	163	6	8	0	166	1	5	5	168	8	5	9
24	170	8	0	0	173	4	1	6	176	0	6	0
25	177	9	4	0	180	6	9	6	183	4	6	3
26	184	10	8	0	187	9	5	7	190	8	6	6
27	192	0	0	0	195	0	1	8	198	0	6	9
28	199	1	4	0	202	2	9	9	205	4	7	0
29	206	2	8	0	209	5	5	9	212	8	7	3
30	213	4	0	0	216	8	1	10	220	0	7	6
31	220	5	4	0	223	10	9	11	227	4	7	9
32	227	6	8	0	231	1	6	0	234	8	8	0
33	234	8	0	0	238	4	2	0	242	0	8	3
34	241	9	4	0	245	6	10	1	249	4	8	6
35	248	10	8	0	252	9	6	2	256	8	8	9
36	256	0	0	0	260	0	2	3	264	0	9	0
37	263	1	4	0	267	2	10	3	271	4	9	3
38	270	2	8	0	274	5	6	4	278	8	9	6
39	277	4	0	0	281	8	2	5	286	0	9	9
40	284	5	4	0	288	10	10	6	293	4	10	0
80	568	10	8	0	577	9	9	0	586	9	8	0

Feet Long.	Side 32¾ In.				Side 33 In.				Side 33¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	10	4	1	1	10	8	3	1	11	0	4
⅜	3	8	8	3	3	9	4	6	3	10	0	9
½	5	7	0	5	5	8	0	9	5	9	1	2
1	7	5	4	6	7	6	9	0	7	8	1	6
2	14	10	9	1	15	1	6	0	15	4	3	1
3	22	4	1	8	22	8	3	0	23	0	4	8
4	29	9	6	3	30	3	0	0	30	8	6	3
5	37	2	10	9	37	9	9	0	38	4	7	9
6	44	8	3	4	45	4	6	0	46	0	9	4
7	52	1	7	11	52	11	3	0	53	8	10	11
8	59	7	0	6	60	6	0	0	61	5	0	6
9	67	0	5	0	68	0	9	0	69	1	2	0
10	74	5	9	7	75	7	6	0	76	9	3	7
11	81	11	2	2	83	2	3	0	84	5	5	2
12	89	4	6	9	90	9	0	0	92	1	6	9
13	96	9	11	3	98	3	9	0	99	9	8	3
14	104	3	3	10	105	10	6	0	107	5	9	10
15	111	8	8	5	113	5	3	0	115	1	11	5
16	119	2	1	0	121	0	0	0	122	10	1	0
17	126	7	5	6	128	6	9	0	130	6	2	6
18	134	0	10	1	136	1	6	0	138	2	4	1
19	141	6	2	8	143	8	3	0	145	10	5	8
20	148	11	7	3	151	3	0	0	153	6	7	3
21	156	4	11	9	158	9	9	0	161	2	8	9
22	163	10	4	4	166	4	6	0	168	10	10	4
23	171	3	8	11	173	11	3	0	176	6	11	11
24	178	9	1	6	181	6	0	0	184	3	1	6
25	186	2	6	0	189	0	9	0	191	11	3	0
26	193	7	10	7	196	7	6	0	199	7	4	7
27	201	1	3	2	204	2	3	0	207	3	6	2
28	208	6	7	9	211	9	0	0	214	11	7	9
29	216	0	0	3	219	3	9	0	222	7	9	3
30	223	5	4	10	226	10	6	0	230	3	10	10
31	230	10	9	5	234	5	3	0	238	0	0	5
32	238	4	2	0	242	0	0	0	245	8	2	0
33	245	9	6	6	249	6	9	0	253	4	3	6
34	253	2	11	1	257	1	6	0	261	0	5	1
35	260	8	3	8	264	8	3	0	268	8	6	8
36	268	1	8	3	272	3	0	0	276	4	8	3
37	275	7	0	9	279	9	9	0	284	0	9	9
38	283	0	5	4	287	4	6	0	291	8	11	4
39	290	5	9	11	294	11	3	0	299	5	0	11
40	297	11	2	6	302	6	0	0	307	1	2	6
80	595	10	5	0	605	0	0	0	614	2	5	0

Feet Long.	Side 33⅓ In.				Side 33⅔ In.				Side 34 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	1	11	4	6	1	11	8	9	2	0	1	0
½	3	10	9	1	3	11	5	6	4	0	2	0
¾	5	10	1	8	5	11	2	3	6	0	3	0
1	7	9	6	3	7	10	11	0	8	0	4	0
2	15	7	0	6	15	9	10	1	16	0	8	0
3	23	4	6	9	23	8	9	2	24	1	0	0
4	31	2	1	0	31	7	8	3	32	1	4	0
5	38	11	7	3	39	6	7	3	40	1	8	0
6	46	9	1	6	47	5	6	4	48	2	0	0
7	54	6	7	9	55	4	5	5	56	2	4	0
8	62	4	2	0	63	3	4	6	64	2	8	0
9	70	1	8	3	71	2	3	6	72	3	0	0
10	77	11	2	6	79	1	2	7	80	3	4	0
11	85	8	8	9	87	0	1	8	88	3	8	0
12	93	6	3	0	94	11	0	9	96	4	0	0
13	101	3	9	3	102	9	11	9	104	4	4	0
14	109	1	3	6	110	8	10	10	112	4	8	0
15	116	10	9	9	118	7	9	11	120	5	0	0
16	124	8	4	0	126	6	9	0	128	5	4	0
17	132	5	10	3	134	5	8	0	136	5	8	0
18	140	3	4	6	142	4	7	1	144	6	0	0
19	148	0	10	9	150	3	6	2	152	6	4	0
20	155	10	5	0	158	2	5	3	160	6	8	0
21	163	7	11	3	166	1	4	3	168	7	0	0
22	171	5	5	6	174	0	3	4	176	7	4	0
23	179	2	11	9	181	11	2	5	184	7	8	0
24	187	0	6	0	189	10	1	6	192	8	0	0
25	194	10	0	3	197	9	0	6	200	8	4	0
26	202	7	6	6	205	7	11	7	208	8	8	0
27	210	5	0	9	213	6	10	8	216	9	0	0
28	218	2	7	0	221	5	9	9	224	9	4	0
29	226	0	1	3	229	4	8	9	232	9	8	0
30	233	9	7	6	237	3	7	10	240	10	0	0
31	241	7	1	9	245	2	6	11	248	10	4	0
32	249	4	8	0	253	1	6	0	256	10	8	0
33	257	2	2	3	261	0	5	0	264	11	0	0
34	264	11	8	6	268	11	4	1	272	11	4	0
35	272	9	2	9	276	10	3	2	280	11	8	0
36	280	6	9	0	284	9	2	3	289	0	0	0
37	288	4	3	3	292	8	1	3	297	0	4	0
38	296	1	9	6	300	7	0	4	305	0	8	0
39	303	11	3	9	308	5	11	5	313	1	0	0
40	311	8	10	0	316	4	10	6	321	1	4	0
80	623	5	8	0	632	9	9	0	642	2	8	0

Feet Long.	Side 34¼ In.				Side 34⅓ In.				Side 34⅜ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts	2ds
¼	2	0	5	3	2	0	9	6	2	1	1	10
⅜	4	0	10	6	4	1	7	1	4	2	3	9
½	6	1	3	9	6	2	4	8	6	3	5	8
¾	8	1	9	0	8	3	2	3	8	4	7	6
1	16	3	6	1	16	6	4	6	16	9	3	1
2	24	5	3	2	24	9	6	9	25	1	10	8
3	32	7	0	3	33	0	9	0	33	6	6	3
4	40	8	9	3	41	3	11	3	41	11	1	9
5	48	10	6	4	49	7	1	6	50	3	9	4
6	57	0	3	5	57	10	3	9	58	8	4	11
7	65	2	0	6	66	1	6	0	67	1	0	6
8	73	3	9	6	74	4	8	3	75	5	8	0
9	81	5	6	7	82	7	10	6	83	10	3	7
10	89	7	3	8	90	11	0	9	92	2	11	2
11	97	9	0	9	99	2	3	0	100	7	6	9
12	105	10	9	9	107	5	5	3	109	0	2	3
13	114	0	6	10	115	8	7	6	117	4	9	10
14	122	2	3	11	123	11	9	9	125	9	5	5
15	130	4	1	0	132	3	0	0	134	2	1	0
16	138	5	10	0	140	6	2	3	142	6	8	6
17	146	7	7	1	148	9	4	6	150	11	4	1
18	154	9	4	2	157	0	6	9	159	3	11	8
19	162	11	1	3	165	3	9	0	167	8	7	3
20	171	0	10	3	173	6	11	3	176	1	2	9
21	179	2	7	4	181	10	1	6	184	5	10	4
22	187	4	4	5	190	1	3	9	192	10	5	11
23	195	6	1	6	198	4	6	0	201	3	1	6
24	203	7	10	6	206	7	8	3	209	7	9	0
25	211	9	7	7	214	10	10	6	218	0	4	7
26	219	11	4	8	223	2	0	9	226	5	0	2
27	228	1	1	9	231	5	3	0	234	9	7	9
28	236	2	10	9	239	8	5	3	243	2	3	3
29	244	4	7	10	247	11	7	6	251	6	10	10
30	252	6	4	11	256	2	9	9	259	11	6	5
31	260	8	2	0	264	6	0	0	268	4	2	0
32	268	9	11	0	272	9	2	3	276	8	9	6
33	276	11	8	1	281	0	4	6	285	1	5	1
34	285	1	5	2	289	3	6	9	293	6	0	8
35	293	3	2	3	297	6	9	0	301	10	8	3
36	301	4	11	3	305	9	11	3	310	3	3	9
37	309	6	8	4	314	1	1	6	318	7	11	4
38	317	8	5	5	322	4	3	9	327	0	6	11
39	325	10	2	6	330	7	6	0	335	5	2	6
40	651	8	5	0	661	3	0	0	670	10	5	0

Feet Long.	Side 35 In.				Side 35¼ In.				Side 35½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	2	1	6	3	2	1	10	7	2	2	3	0
½	4	3	0	6	4	3	9	3	4	4	6	1
¾	6	4	6	9	6	5	7	11	6	6	9	2
1	8	6	1	0	8	7	6	6	8	9	0	3
2	17	0	2	0	17	3	1	1	17	6	0	6
3	25	6	3	0	25	10	7	8	26	3	0	9
4	34	0	4	0	34	6	2	3	35	0	1	0
5	42	6	5	0	43	1	8	9	43	9	1	3
6	51	0	6	0	51	9	3	4	52	6	1	6
7	59	6	7	0	60	4	9	11	61	3	1	9
8	68	0	8	0	69	0	4	6	70	0	2	0
9	76	6	9	0	77	7	11	0	78	9	2	3
10	85	0	10	0	86	3	5	7	87	6	2	6
11	93	6	11	0	94	11	0	2	96	3	2	9
12	102	1	0	0	103	6	6	9	105	0	3	0
13	110	7	1	0	112	2	1	3	113	9	3	3
14	119	1	2	0	120	9	7	10	122	6	3	6
15	127	7	3	0	129	5	2	5	131	3	3	9
16	136	1	4	0	138	0	9	0	140	0	4	0
17	144	7	5	0	146	8	3	6	148	9	4	3
18	153	1	6	0	155	3	10	1	157	6	4	6
19	161	7	7	0	163	11	4	8	166	3	4	9
20	170	1	8	0	172	6	11	3	175	0	5	0
21	178	7	9	0	181	2	5	9	183	9	5	3
22	187	1	10	0	189	10	0	4	192	6	5	6
23	195	7	11	0	198	5	6	11	201	3	5	9
24	204	2	0	0	207	1	1	6	210	0	6	0
25	212	8	1	0	215	8	8	0	218	9	6	3
26	221	2	2	0	224	4	2	7	227	6	6	6
27	229	8	3	0	232	11	9	2	236	3	6	9
28	238	2	4	0	241	7	3	9	245	0	7	0
29	246	8	5	0	250	2	10	3	253	9	7	3
30	255	2	6	0	258	10	4	10	262	6	7	6
31	263	8	7	0	267	5	11	5	271	3	7	9
32	272	2	8	0	276	1	6	0	280	0	8	0
33	280	8	9	0	284	9	0	6	288	9	8	3
34	289	2	10	0	293	4	7	1	297	6	8	6
35	397	8	11	0	302	0	1	8	306	3	8	9
36	306	3	0	0	310	7	8	3	315	0	9	0
37	314	9	1	0	319	3	2	9	323	9	9	3
38	323	3	2	0	327	10	9	4	332	6	9	6
39	331	9	3	0	336	6	3	11	341	3	9	9
40	340	3	4	0	345	1	10	6	350	0	10	0
80	680	6	8	0	690	3	9	0	700	1	8	0

Feet Long.	Side 35¾ In.				Side 36 In.				Side 36¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	2	2	7	6	2	3	0	0	2	3	4	6
½	4	5	3	0	4	6	0	0	4	6	9	0
¾	6	7	10	6	6	9	0	0	6	10	1	6
1	8	10	6	0	9	0	0	0	9	1	6	0
2	17	9	0	1	18	0	0	0	18	3	0	1
3	26	7	6	2	27	0	0	0	27	4	6	2
4	35	6	0	3	36	0	0	0	36	6	0	3
5	44	4	6	3	45	0	0	0	45	7	6	3
6	53	3	0	4	54	0	0	0	54	9	0	4
7	62	1	6	5	63	0	0	0	63	10	6	5
8	71	0	0	6	72	0	0	0	73	0	0	6
9	79	10	6	6	81	0	0	0	82	1	6	6
10	88	9	0	7	90	0	0	0	91	3	0	7
11	97	7	6	8	99	0	0	0	100	4	6	8
12	106	6	0	9	108	0	0	0	109	6	0	9
13	115	4	6	9	117	0	0	0	118	7	6	9
14	124	3	0	10	126	0	0	0	127	9	0	10
15	133	1	6	11	135	0	0	0	136	10	6	11
16	142	0	1	0	144	0	0	0	146	0	1	0
17	150	10	7	0	153	0	0	0	155	1	7	0
18	159	9	1	1	162	0	0	0	164	3	1	1
19	168	7	7	2	171	0	0	0	173	4	7	2
20	177	6	1	3	180	0	0	0	182	6	1	3
21	186	4	7	3	189	0	0	0	191	7	7	3
22	195	3	1	4	198	0	0	0	200	9	1	4
23	204	1	7	5	207	0	0	0	209	10	7	5
24	213	0	1	6	216	0	0	0	219	0	1	6
25	221	10	7	6	225	0	0	0	228	1	7	6
26	230	9	1	7	234	0	0	0	237	3	1	7
27	239	7	7	8	243	0	0	0	246	4	7	8
28	248	6	1	9	252	0	0	0	255	6	1	9
29	257	4	7	9	261	0	0	0	264	7	7	9
30	266	3	1	10	270	0	0	0	273	9	1	10
31	275	1	7	11	279	0	0	0	282	10	7	11
32	284	0	2	0	288	0	0	0	292	0	2	0
33	292	10	8	0	297	0	0	0	301	1	8	0
34	301	9	2	1	306	0	0	0	310	3	2	1
35	310	7	8	2	315	0	0	0	319	4	8	2
36	319	6	2	3	324	0	0	0	328	6	2	3
37	328	4	8	3	333	0	0	0	337	7	8	3
38	337	3	2	4	342	0	0	0	346	9	2	4
39	346	1	8	5	351	0	0	0	355	10	8	5
40	355	0	2	6	360	0	0	0	365	0	2	6
80	710	0	5	0	720	0	0	0	730	0	5	0

Feet Long.	Side 36¼ In.				Side 36⅜ In.				Side 37 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	2	3	9	0	2	4	1	7	2	4	6	3
½	4	7	6	1	4	8	3	3	4	9	0	6
¾	6	11	3	2	7	0	4	11	7	1	6	9
1	9	3	0	3	9	4	6	6	9	6	1	0
2	18	6	0	6	18	9	1	1	19	0	2	0
3	27	9	0	9	28	1	7	8	28	6	3	0
4	37	0	1	0	37	6	2	3	38	0	4	0
5	46	3	1	3	46	10	8	9	47	6	5	0
6	55	6	1	6	56	3	3	4	57	0	6	0
7	64	9	1	9	65	7	9	11	66	6	7	0
8	74	0	2	0	75	0	4	6	76	0	8	0
9	83	3	2	3	84	4	11	0	85	6	9	0
10	92	6	2	6	93	9	5	7	95	0	10	0
11	101	9	2	9	103	2	0	2	104	6	11	0
12	111	0	3	0	112	6	6	9	114	1	0	0
13	120	3	3	3	121	11	1	3	123	7	1	0
14	129	6	3	6	131	3	7	10	133	1	2	0
15	138	9	3	9	140	8	2	5	142	7	3	0
16	148	0	4	0	150	0	9	0	152	1	4	0
17	157	3	4	3	159	5	3	6	161	7	5	0
18	166	6	4	6	168	9	10	1	171	1	6	0
19	175	9	4	9	178	2	4	8	180	7	7	0
20	185	0	5	0	187	6	11	3	190	1	8	0
21	194	3	5	3	196	11	5	9	199	7	9	0
22	203	6	5	6	206	4	0	4	209	1	10	0
23	212	9	5	9	215	8	6	11	218	7	11	0
24	222	0	6	0	225	1	1	6	228	2	0	0
25	231	3	6	3	234	5	8	0	237	8	1	0
26	240	6	6	6	243	10	2	7	247	2	2	0
27	249	9	6	9	253	2	9	2	256	8	3	0
28	259	0	7	0	262	7	3	9	266	2	4	0
29	268	3	7	3	271	11	10	3	275	8	5	0
30	277	6	7	6	281	4	4	10	285	2	6	0
31	286	9	7	9	290	8	11	5	294	8	7	0
32	296	0	8	0	300	1	6	0	304	2	8	0
33	305	3	8	3	309	6	0	6	313	8	9	0
34	314	6	8	6	318	10	7	1	323	2	10	0
35	323	9	8	9	328	3	1	8	332	8	11	0
36	333	0	9	0	337	7	8	3	342	3	0	0
37	342	3	9	3	347	0	2	9	351	9	1	0
38	351	6	9	6	356	4	9	4	361	3	2	0
39	360	9	9	9	365	9	3	11	370	9	3	0
40	370	0	10	0	375	1	10	6	380	3	4	0
80	740	1	8	0	750	3	9	0	760	6	8	0

Feet Long.	Side 37½ In.				Side 37⅓ In.				Side 37⅝ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	2	4	10	10	2	5	3	6	2	5	8	3
½	4	9	9	9	4	10	7	1	4	11	4	6
¾	7	2	8	8	7	3	10	8	7	5	0	9
1	9	7	7	6	9	9	2	3	9	10	9	0
2	19	3	3	1	19	6	4	6	19	9	6	1
3	28	10	10	8	29	3	6	9	29	8	3	2
4	38	6	6	3	39	0	9	0	39	7	0	3
5	48	2	1	9	48	9	11	3	49	5	9	3
6	57	9	9	4	58	7	1	6	59	4	6	4
7	67	5	4	11	68	4	3	9	69	3	3	5
8	77	1	0	6	78	1	6	0	79	2	0	6
9	86	8	8	0	87	10	8	3	89	0	9	6
10	96	4	3	7	97	7	10	6	98	11	6	7
11	105	11	11	2	107	5	0	9	108	10	3	8
12	115	7	6	9	117	2	3	0	118	9	0	9
13	125	3	2	3	126	11	5	3	128	7	9	9
14	134	10	9	10	136	8	7	6	138	6	6	10
15	144	6	5	5	146	5	9	9	148	5	3	11
16	154	2	1	0	156	3	0	0	158	4	1	0
17	163	9	8	6	166	0	2	3	168	2	10	0
18	173	5	4	1	175	9	4	6	178	1	7	1
19	183	0	11	8	185	6	6	9	188	0	4	2
20	192	8	7	3	195	3	9	0	197	11	1	3
21	202	4	2	9	205	0	11	3	207	9	10	3
22	211	11	10	4	214	10	1	6	217	8	7	4
23	221	7	5	11	224	7	3	9	227	7	4	5
24	231	3	1	6	234	4	6	0	237	6	1	6
25	240	10	9	0	244	1	8	3	247	4	10	6
26	250	6	4	7	253	10	10	6	257	3	7	7
27	260	2	0	2	263	8	0	9	267	2	4	8
28	269	9	7	9	273	5	3	0	277	1	1	9
29	279	5	3	3	283	2	5	3	286	11	10	9
30	289	0	10	10	292	11	8	6	296	10	7	10
31	298	8	6	5	302	8	9	9	306	9	4	11
32	308	4	2	0	312	6	0	0	316	8	2	0
33	317	11	9	6	322	3	2	3	326	6	11	0
34	327	7	5	1	332	0	4	6	336	5	8	1
35	337	3	0	8	341	9	6	9	346	4	5	2
36	346	10	8	3	351	6	9	0	356	3	2	3
37	356	6	3	9	361	3	11	3	366	1	11	3
38	366	1	11	4	371	1	1	6	376	0	8	4
39	375	9	6	11	380	10	3	9	385	11	5	5
40	385	5	2	6	390	7	6	0	395	10	2	6
80	770	10	5	0	781	3	0	0	791	8	5	0

Feet Long.	Side 38 In.				Side 38¼ In.				Side 38½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	2	6	1	0	2	6	5	9	2	6	10	6
½	5	0	2	0	5	0	11	6	5	1	9	1
¾	7	6	3	0	7	7	5	3	7	8	7	8
1	10	0	4	0	10	1	11	0	10	3	6	3
2	20	0	8	0	20	3	10	1	20	7	0	6
3	30	1	0	0	30	5	9	2	30	10	6	9
4	40	1	4	0	40	7	8	3	41	2	1	0
5	50	1	8	0	50	9	7	3	51	5	7	3
6	60	2	0	0	60	11	6	4	61	9	1	6
7	70	2	4	0	71	1	5	5	72	0	7	9
8	80	2	8	0	81	3	4	6	82	4	2	0
9	90	3	0	0	91	5	3	6	92	7	8	3
10	100	3	4	0	101	7	2	7	102	11	2	6
11	110	3	8	0	111	9	1	8	113	2	8	9
12	120	4	0	0	121	11	0	9	123	6	3	0
13	130	4	4	0	132	0	11	9	133	9	9	3
14	140	4	8	0	142	2	10	10	144	1	3	6
15	150	5	0	0	152	4	9	11	154	4	9	9
16	160	5	4	0	162	6	9	0	164	8	4	0
17	170	5	8	0	172	8	8	0	174	11	10	3
18	180	6	0	0	182	10	7	1	185	3	4	6
19	190	6	4	0	193	0	6	2	195	6	10	9
20	200	6	8	0	203	2	5	3	205	10	5	0
21	210	7	0	0	213	4	4	3	216	1	11	3
22	220	7	4	0	223	6	3	4	226	5	5	6
23	230	7	8	0	233	8	2	5	236	8	11	9
24	240	8	0	0	243	10	1	6	247	0	6	0
25	250	8	4	0	254	0	0	6	257	4	0	3
26	260	8	8	0	264	1	11	7	267	7	6	6
27	270	9	0	0	274	3	10	8	277	11	0	9
28	280	9	4	0	284	5	9	9	288	2	7	0
29	290	9	8	0	294	7	8	9	298	6	1	3
30	300	10	0	0	304	9	7	10	308	9	7	6
31	310	10	4	0	314	11	6	11	319	1	1	9
32	320	10	8	0	325	1	6	0	329	4	8	0
33	330	11	0	0	335	3	5	0	339	8	2	3
34	340	11	4	0	345	5	4	1	349	11	8	6
35	350	11	8	0	355	7	3	2	360	3	2	9
36	361	0	0	0	365	9	2	3	370	6	9	0
37	371	0	4	0	375	11	1	3	380	10	3	3
38	381	0	8	0	386	1	0	4	391	1	9	6
39	391	1	0	0	396	2	11	5	401	5	3	9
40	401	1	4	0	406	4	10	6	411	8	10	0
80	802	2	8	0	812	9	9	0	823	5	8	0

Feet Long.	Side 38¾ In.				Side 39 In.				Side 39¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	2	7	3	4	2	7	8	3	2	8	1	1
½	5	2	6	9	5	3	4	6	5	4	2	3
¾	7	9	10	2	7	11	0	9	8	0	3	5
1	10	5	1	6	10	6	9	0	10	8	4	6
2	20	10	3	1	21	1	6	0	21	4	9	1
3	31	3	4	8	31	8	3	0	32	1	1	8
4	41	8	6	3	42	3	0	0	42	9	6	3
5	52	1	7	9	52	9	9	0	53	5	10	9
6	62	6	9	4	63	4	6	0	64	2	3	4
7	72	11	10	11	73	11	3	0	74	10	7	11
8	83	5	0	6	84	6	0	0	85	7	0	6
9	93	10	2	0	95	0	9	0	96	3	5	0
10	104	3	3	7	105	7	6	0	106	11	9	7
11	114	8	5	2	116	2	3	0	117	8	2	2
12	125	1	6	9	126	9	0	0	128	4	6	9
13	135	6	8	3	137	3	9	0	139	0	11	3
14	145	11	9	10	147	10	6	0	149	9	3	10
15	156	4	11	5	158	5	3	0	160	5	8	5
16	166	10	1	0	169	0	0	0	171	2	1	0
17	177	3	2	6	179	6	9	0	181	10	5	6
18	187	8	4	1	190	1	6	0	192	6	10	1
19	198	1	5	8	200	8	3	0	203	3	2	8
20	208	6	7	3	211	3	0	0	213	11	7	3
21	218	11	8	9	221	9	9	0	224	7	11	9
22	229	4	10	4	232	4	6	0	235	4	4	4
23	239	9	11	11	242	11	3	0	246	0	8	11
24	250	3	1	6	253	6	0	0	256	9	1	6
25	260	8	3	0	264	0	9	0	267	5	6	0
26	271	1	4	7	274	7	6	0	278	1	10	7
27	281	6	6	2	285	2	3	0	288	10	3	2
28	291	11	7	9	295	9	0	0	299	6	7	9
29	302	4	9	3	306	3	9	0	310	3	0	3
30	312	9	10	10	316	10	6	0	320	11	4	10
31	323	3	0	5	327	5	3	0	331	7	9	5
32	333	8	2	0	338	0	0	0	342	4	2	0
33	344	1	3	6	348	6	9	0	353	0	6	6
34	354	6	5	1	359	1	6	0	363	8	11	1
35	364	11	6	8	369	8	3	0	374	5	3	8
36	375	4	8	3	380	3	0	0	385	1	8	3
37	385	9	9	9	390	9	9	0	395	10	0	9
38	396	2	11	4	401	4	6	0	406	6	5	4
39	406	8	0	11	411	11	3	0	417	2	9	11
40	417	1	2	6	422	6	0	0	427	11	2	6
80	834	2	5	0	845	0	0	0	855	10	5	0

Feet Long.	Side 39½ In.				Side 39¾ In.				Side 40 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	2	8	6	0	2	8	11	0	2	9	4	0
½	5	5	0	1	5	5	10	0	5	6	8	0
¾	8	1	6	2	8	2	9	0	8	4	0	0
1	10	10	0	3	10	11	8	0	11	1	4	0
2	21	8	0	6	21	11	4	1	22	2	8	0
3	32	6	0	9	32	11	0	2	33	4	0	0
4	43	4	1	0	43	10	8	3	44	5	4	0
5	54	2	1	3	54	10	4	3	55	6	8	0
6	65	0	1	6	65	10	0	4	66	8	0	0
7	75	10	1	9	76	9	8	5	77	9	4	0
8	86	8	2	0	87	9	4	6	88	10	8	0
9	97	6	2	3	98	9	0	6	100	0	0	0
10	108	4	2	6	109	8	8	7	111	1	4	0
11	119	2	2	9	120	8	4	8	122	2	8	0
12	130	0	3	0	131	8	0	9	133	4	0	0
13	140	10	3	3	142	7	8	9	144	5	4	0
14	151	8	3	6	153	7	4	10	155	6	8	0
15	162	6	3	9	164	7	0	11	166	8	0	0
16	173	4	4	0	175	6	9	0	177	9	4	0
17	184	2	4	3	186	6	5	0	188	10	8	0
18	195	0	4	6	197	6	1	1	200	0	0	0
19	205	10	4	9	208	5	9	2	211	1	4	0
20	216	8	5	0	219	5	5	3	222	2	8	0
21	227	6	5	3	230	5	1	3	233	4	0	0
22	238	4	5	6	241	4	9	4	244	5	4	0
23	249	2	5	9	252	4	5	5	255	6	8	0
24	260	0	6	0	263	4	1	6	266	8	0	0
25	270	10	6	3	274	3	9	6	277	9	4	0
26	281	8	6	6	285	3	5	7	288	10	8	0
27	292	6	6	9	296	3	1	8	300	0	0	0
28	303	4	7	0	307	2	9	9	311	1	4	0
29	314	2	7	3	318	2	5	9	322	2	8	0
30	325	0	7	6	329	2	1	10	333	4	0	0
31	335	10	7	9	340	1	9	11	344	5	4	0
32	346	8	8	0	351	1	6	0	355	6	8	0
33	357	6	8	3	362	1	2	0	366	8	0	0
34	368	4	8	6	373	0	10	1	377	9	4	0
35	379	2	8	9	384	0	6	2	388	10	8	0
36	390	0	9	0	395	0	2	3	400	0	0	0
37	400	10	9	3	405	11	10	3	411	1	4	0
38	411	8	9	6	416	11	6	4	422	2	8	0
39	422	6	9	9	427	11	2	5	433	4	0	0
40	433	4	10	0	438	10	10	6	444	5	4	0
80	866	9	8	0	877	9	9	0	888	10	8	0

Feet Long.	Side 40½ In.				Side 40⅓ In.				Side 40¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	2	9	9	0	2	10	2	0	2	10	7	1
½	5	7	6	0	5	8	4	1	5	9	2	3
¾	8	5	3	0	8	6	6	2	8	7	9	5
1	11	3	0	0	11	4	8	3	11	6	4	6
2	22	6	0	1	22	9	4	6	23	0	9	1
3	33	9	0	2	34	2	0	9	34	7	1	8
4	45	0	0	3	45	6	9	0	46	1	6	3
5	56	3	0	3	56	11	5	3	57	7	10	9
6	67	6	0	4	68	4	1	6	69	2	3	4
7	78	9	0	5	79	8	9	9	80	8	7	11
8	90	0	0	6	91	1	6	0	92	3	0	6
9	101	3	0	6	102	6	2	3	103	9	5	0
10	112	6	0	7	113	10	10	6	115	3	9	7
11	123	9	0	8	125	3	6	9	126	10	2	2
12	135	0	0	9	136	8	3	0	138	4	6	9
13	146	3	0	9	148	0	11	3	149	10	11	3
14	157	6	0	10	159	5	7	6	161	5	3	10
15	168	9	0	11	170	10	3	9	172	11	8	5
16	180	0	1	0	182	3	0	0	184	6	1	0
17	191	3	1	0	193	7	8	3	196	0	5	6
18	202	6	1	1	205	0	4	6	207	6	10	1
19	213	9	1	2	216	5	0	9	219	1	2	8
20	225	0	1	3	227	9	9	0	230	7	7	3
21	236	3	1	3	239	2	5	3	242	1	11	9
22	247	6	1	4	250	7	1	6	253	8	4	4
23	258	9	1	5	261	11	9	9	265	2	8	11
24	270	0	1	6	273	4	6	0	276	9	1	6
25	281	3	1	6	284	9	2	3	288	3	6	0
26	292	6	1	7	296	1	10	6	299	9	10	7
27	303	9	1	8	307	6	6	9	311	4	3	2
28	315	0	1	9	318	11	3	0	322	10	7	9
29	326	3	1	9	330	3	11	3	334	5	0	3
30	337	6	1	10	341	8	7	6	345	11	4	10
31	348	9	1	11	353	1	3	9	357	5	9	5
32	360	0	2	0	364	6	0	0	369	0	2	0
33	371	3	2	0	375	10	8	3	380	6	6	6
34	382	6	2	1	387	3	4	6	392	0	11	1
35	393	9	2	2	398	8	0	9	403	7	3	8
36	405	0	2	3	410	0	9	0	415	1	8	3
37	416	3	2	3	421	5	5	3	426	8	0	9
38	427	6	2	4	432	10	1	6	438	2	5	4
39	438	9	2	5	444	2	9	9	449	8	9	11
40	450	0	2	6	455	7	6	0	461	3	2	6
80	900	0	5	0	911	3	0	0	922	6	5	0

Feet Long.	Side 41 In.				Side 41¼ In.				Side 41½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	2	11	0	3	2	11	5	4	2	11	10	6
½	5	10	0	6	5	10	10	9	5	11	9	1
¾	8	9	0	9	8	10	4	2	8	11	7	8
1	11	8	1	0	11	9	9	6	11	11	6	3
2	23	4	2	0	23	7	7	1	23	11	0	6
3	35	0	3	0	35	5	4	8	35	10	6	9
4	46	8	4	0	47	3	2	3	47	10	1	0
5	58	4	5	0	59	0	11	9	59	9	7	3
6	70	0	6	0	70	10	9	4	71	9	1	6
7	81	8	7	0	82	8	6	11	83	8	7	9
8	93	4	8	0	94	6	4	6	95	8	2	0
9	105	0	9	0	106	4	2	0	107	7	8	3
10	116	8	10	0	118	1	11	7	119	7	2	6
11	128	4	11	0	129	11	9	2	131	6	8	9
12	140	1	0	0	141	9	6	9	143	6	3	0
13	151	9	1	0	153	7	4	3	155	5	9	3
14	163	5	2	0	165	5	1	10	167	5	3	6
15	175	1	3	0	177	2	11	5	179	4	9	9
16	186	9	4	0	189	0	9	0	191	4	4	0
17	198	5	5	0	200	10	6	6	203	3	10	3
18	210	1	6	0	212	8	4	1	215	3	4	6
19	221	9	7	0	224	6	1	8	227	2	10	9
20	233	5	8	0	236	3	11	3	239	2	5	0
21	245	1	9	0	248	1	8	9	251	1	11	3
22	256	9	10	0	259	11	6	4	263	1	5	6
23	268	5	11	0	271	9	3	11	275	0	11	9
24	280	2	0	0	283	7	1	6	287	0	6	0
25	291	10	1	0	295	4	11	0	299	0	0	3
26	303	6	2	0	307	2	8	7	310	11	6	6
27	315	2	3	0	319	0	6	2	322	11	0	9
28	326	10	4	0	330	10	3	9	334	10	7	0
29	338	6	5	0	342	8	1	3	346	10	1	3
30	350	2	6	0	354	5	11	10	358	9	7	6
31	361	10	7	0	366	3	8	5	370	9	1	9
32	373	6	8	0	378	1	6	0	382	8	8	0
33	385	2	9	0	389	11	3	6	394	8	2	3
34	396	10	10	0	401	9	1	1	406	7	8	6
35	408	6	11	0	413	6	10	8	418	7	2	9
36	420	3	0	0	425	4	8	3	430	6	9	0
37	431	11	1	0	437	2	5	9	442	6	3	3
38	443	7	2	0	449	0	3	4	454	5	9	6
39	455	3	3	0	460	10	0	11	466	5	3	9
40	466	11	4	0	472	7	10	6	478	4	10	0
80	933	10	8	0	945	3	9	0	956	9	8	0

Feet Long.	Side 41¾ In.				Side 42 In.				Side 42¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	3	0	3	9	3	0	9	0	3	1	2	3
½	6	0	7	6	6	1	6	0	6	2	4	6
¾	9	0	11	3	9	2	3	0	9	3	6	9
1	12	1	3	0	12	3	0	0	12	4	9	0
2	24	2	6	1	24	6	0	0	24	9	6	1
3	36	3	9	2	36	9	0	0	37	2	3	2
4	48	5	0	3	49	0	0	0	49	7	0	3
5	60	6	3	3	61	3	0	0	61	11	9	3
6	72	7	6	4	73	6	0	0	74	4	6	4
7	84	8	9	5	85	9	0	0	86	9	3	5
8	96	10	0	6	98	0	0	0	99	2	0	6
9	108	11	3	6	110	3	0	0	111	6	9	6
10	121	0	6	7	122	6	0	0	123	11	6	7
11	133	1	9	8	134	9	0	0	136	4	3	8
12	145	3	0	9	147	0	0	0	148	9	0	9
13	157	4	3	9	159	3	0	0	161	1	9	9
14	169	5	6	10	171	6	0	0	173	6	6	10
15	181	6	9	11	183	9	0	0	185	11	3	11
16	193	8	1	0	196	0	0	0	198	4	1	0
17	205	9	4	0	208	3	0	0	210	8	10	0
18	217	10	7	1	220	6	0	0	223	1	7	1
19	229	11	10	2	232	9	0	0	235	6	4	2
20	242	1	1	3	245	0	0	0	247	11	1	3
21	254	2	4	3	257	3	0	0	260	3	10	3
22	266	3	7	4	269	6	0	0	272	8	7	4
23	278	4	10	5	281	9	0	0	285	1	4	5
24	290	6	1	6	294	0	0	0	297	6	1	6
25	302	7	4	6	306	3	0	0	309	10	10	6
26	314	8	7	7	318	6	0	0	322	3	7	7
27	326	9	10	8	330	9	0	0	334	8	4	8
28	338	11	1	9	343	0	0	0	347	1	1	9
29	351	0	4	9	355	3	0	0	359	5	10	9
30	363	1	7	10	367	6	0	0	371	10	7	10
31	375	2	10	11	379	9	0	0	384	3	4	11
32	387	4	2	0	392	0	0	0	396	8	2	0
33	399	5	5	0	404	3	0	0	409	0	11	0
34	411	6	8	1	416	6	0	0	421	5	8	1
35	423	7	11	2	428	9	0	0	433	10	5	2
36	435	9	2	3	441	0	0	0	446	3	2	3
37	447	10	5	3	453	3	0	0	458	7	11	3
38	459	11	8	4	465	6	0	0	471	0	8	4
39	472	0	11	5	477	9	0	0	483	5	5	5
40	484	2	2	6	490	0	0	0	495	10	2	6
80	968	4	5	0	980	0	0	0	991	8	5	0

Feet Long.	Side 42½ In.				Side 42¾ In.				Side 43 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	3	1	7	6	3	2	0	10	3	2	6	3
½	6	3	3	1	6	4	1	9	6	5	0	6
¾	9	4	10	8	9	6	2	8	9	7	6	9
1	12	6	6	3	12	8	3	6	12	10	1	0
2	25	1	0	6	25	4	7	1	25	8	2	0
3	37	7	6	9	38	0	10	8	38	6	3	0
4	50	2	1	0	50	9	2	3	51	4	4	0
5	62	8	7	3	63	5	5	9	64	2	5	0
6	75	3	1	6	76	1	9	4	77	0	6	0
7	87	9	7	9	88	10	0	11	89	10	7	0
8	100	4	2	0	101	6	4	6	102	8	8	0
9	112	10	8	3	114	2	8	0	115	6	9	0
10	125	5	2	6	126	10	11	7	128	4	10	0
11	137	11	8	9	139	7	3	2	141	2	11	0
12	150	6	3	0	152	3	6	9	154	1	0	0
13	163	0	9	3	164	11	10	3	166	11	1	0
14	175	7	3	6	177	8	1	10	179	9	2	0
15	188	1	9	9	190	4	5	5	192	7	3	0
16	200	8	4	0	203	0	9	0	205	5	4	0
17	213	2	10	3	215	9	0	6	218	3	5	0
18	225	9	4	6	228	5	4	1	231	1	6	0
19	238	3	10	9	241	1	7	8	243	11	7	0
20	250	10	5	0	253	9	11	3	256	9	8	0
21	263	4	11	3	276	6	2	9	269	7	9	0
22	275	11	5	6	289	2	6	4	282	5	10	0
23	288	5	11	9	301	10	9	11	295	3	11	0
24	301	0	6	0	304	7	1	6	308	2	0	0
25	313	7	0	3	317	3	5	0	321	0	1	0
26	326	1	6	6	329	11	8	7	333	10	2	0
27	338	8	0	9	342	8	0	2	346	8	3	0
28	351	2	7	0	355	4	3	9	359	6	4	0
29	363	9	1	3	368	0	7	3	372	4	5	0
30	376	3	7	6	380	8	10	10	385	2	6	0
31	388	10	1	9	393	5	2	5	398	0	7	0
32	401	4	8	0	406	1	6	0	410	10	8	0
33	413	11	2	3	418	9	9	6	423	8	9	0
34	426	5	8	6	431	6	1	1	436	6	10	0
35	439	0	2	9	444	2	4	8	449	4	11	0
36	451	6	9	0	456	10	8	3	462	3	0	0
37	464	1	3	3	469	6	11	9	475	1	1	0
38	476	7	9	6	482	3	3	4	487	11	2	0
39	489	2	3	9	494	11	6	11	500	9	3	0
40	501	8	10	0	507	7	10	6	513	7	4	0
80	1003	5	8	0	1015	3	9	0	1027	2	8	0

Feet Long.	Side 43¾ In.				Side 43½ In.				Side 43¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	3	2	11	7	3	3	5	0	3	3	10	6
½	6	5	11	3	6	6	10	1	6	7	9	0
¾	9	8	10	11	9	10	3	2	9	11	7	6
1	12	11	10	6	13	1	8	3	13	3	6	0
2	25	11	9	1	26	3	4	6	26	7	0	1
3	38	11	7	8	39	5	0	9	39	10	6	2
4	51	11	6	3	52	6	9	0	53	2	0	3
5	64	11	4	9	65	8	5	3	66	5	6	3
6	77	11	3	4	78	10	1	6	79	9	0	4
7	90	11	1	11	91	11	9	9	93	0	6	5
8	103	11	0	6	105	1	6	0	106	4	0	6
9	116	10	11	0	118	3	2	3	119	7	6	6
10	129	10	9	7	131	4	10	6	132	11	0	7
11	142	10	8	2	144	6	6	9	146	2	6	8
12	155	10	6	9	157	8	3	0	159	6	0	9
13	168	10	5	3	170	9	11	3	172	9	6	9
14	181	10	3	10	183	11	7	6	186	1	0	10
15	194	10	2	5	197	1	3	9	199	4	6	11
16	207	10	1	0	210	3	0	0	212	8	1	0
17	220	9	11	6	223	4	8	3	225	11	7	0
18	233	9	10	1	236	6	4	6	239	3	1	1
19	246	9	8	8	249	8	0	9	252	6	7	2
20	259	9	7	3	262	9	9	0	265	10	1	3
21	272	9	5	9	275	11	5	3	279	1	7	3
22	285	9	4	4	289	1	1	6	292	5	1	4
23	298	9	2	11	302	2	9	9	305	8	7	5
24	311	9	1	6	315	4	6	0	319	0	1	6
25	324	9	0	0	328	6	2	3	332	3	7	6
26	337	8	10	7	341	7	10	6	345	7	1	7
27	350	8	9	2	354	9	6	9	358	10	7	8
28	363	8	7	9	367	11	3	0	372	2	1	9
29	376	8	6	3	381	0	11	3	385	5	7	9
30	389	8	4	10	394	2	7	6	398	9	1	10
31	402	8	3	5	407	4	3	9	412	0	7	11
32	415	8	2	0	420	6	0	0	425	4	2	0
33	428	8	0	6	433	7	8	3	438	7	8	0
34	441	7	11	1	446	9	4	6	451	11	2	1
35	454	7	9	8	459	11	0	9	465	2	8	2
36	467	7	8	3	473	0	9	0	478	6	2	3
37	480	7	6	9	486	2	5	3	491	9	8	3
38	493	7	5	4	499	4	1	6	505	1	2	4
39	506	7	3	11	512	5	9	9	518	4	8	5
40	519	7	2	6	525	7	6	0	531	8	2	6
80	1039	2	5	0	1051	3	0	0	1063	4	5	0

Feet Long.	Side 44 In.				Side 44¼ In.				Side 44½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	3	4	4	0	3	4	9	6	3	5	3	0
½	6	8	8	0	6	9	7	0	6	10	6	1
¾	10	1	0	0	10	2	4	6	10	3	9	2
1	13	5	4	0	13	7	2	0	13	9	0	3
2	26	10	8	0	27	2	4	1	27	6	0	6
3	40	4	0	0	40	9	6	2	41	3	0	9
4	53	9	4	0	54	4	8	3	55	0	1	0
5	67	2	8	0	67	11	10	3	68	9	1	3
6	80	8	0	0	81	7	0	4	82	6	1	6
7	94	1	4	0	95	2	2	5	96	3	1	9
8	107	6	8	0	108	9	4	6	110	0	2	0
9	121	0	0	0	122	4	6	6	123	9	2	3
10	134	5	4	0	135	11	8	7	137	6	2	6
11	147	10	8	0	149	6	10	8	151	3	2	9
12	161	4	0	0	163	2	0	9	165	0	3	0
13	174	9	4	0	176	9	2	9	178	9	3	3
14	188	2	8	0	190	4	4	10	192	6	3	6
15	201	8	0	0	203	11	6	11	206	3	3	9
16	215	1	4	0	217	6	9	0	220	0	4	0
17	228	6	8	0	231	1	11	0	233	9	4	3
18	242	0	0	0	244	9	1	1	247	6	4	6
19	255	5	4	0	258	4	3	2	261	3	4	9
20	268	10	8	0	271	11	5	3	275	0	5	0
21	282	4	0	0	285	6	7	3	288	9	5	3
22	295	9	4	0	299	1	9	4	302	6	5	6
23	309	2	8	0	312	8	11	5	316	3	5	9
24	322	8	0	0	326	4	1	6	330	0	6	0
25	336	1	4	0	339	11	3	6	343	9	6	3
26	349	6	8	0	353	6	5	7	357	6	6	6
27	363	0	0	0	367	1	7	8	371	3	6	9
28	376	5	4	0	380	8	9	9	385	0	7	0
29	389	10	8	0	394	3	11	9	398	9	7	3
30	403	4	0	0	407	11	1	10	412	6	7	6
31	416	9	4	0	421	6	3	11	426	3	7	9
32	430	2	8	0	435	1	6	0	440	0	8	0
33	443	8	0	0	448	8	8	0	453	9	8	3
34	457	1	4	0	462	3	10	1	467	6	8	6
35	470	6	8	0	475	11	0	2	481	3	8	9
36	484	0	0	0	489	6	2	3	495	0	9	0
37	497	5	4	0	503	1	4	3	508	9	9	3
38	510	10	8	0	516	8	6	4	522	6	9	6
39	524	4	0	0	530	3	8	5	536	3	9	9
40	537	9	4	0	543	10	10	6	550	0	10	0
80	1075	6	8	0	1087	9	9	0	1100	1	8	0

Feet Long.	Side 44¾ In.				Side 45 In.				Side 45¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	3	5	8	7	3	6	2	3	3	6	7	10
½	6	11	5	3	7	0	4	6	7	1	3	9
¾	10	5	1	11	10	6	6	9	10	7	11	8
1	13	10	10	6	14	0	9	0	14	2	7	6
2	27	9	9	1	28	1	6	0	28	5	3	1
3	41	8	7	8	42	2	3	0	42	7	10	8
4	55	7	6	3	56	3	0	0	56	10	6	3
5	69	6	4	9	70	3	9	0	71	1	1	9
6	83	5	3	4	84	4	6	0	85	3	9	4
7	97	4	1	11	98	5	3	0	99	6	4	11
8	111	3	0	6	112	6	0	0	113	9	0	6
9	125	1	11	0	126	6	9	0	127	11	8	0
10	139	0	9	7	140	7	6	0	142	2	3	7
11	152	11	8	2	154	8	3	0	156	4	11	2
12	166	10	6	9	168	9	0	0	170	7	6	9
13	180	9	5	3	182	9	9	0	184	10	2	3
14	194	8	3	10	196	10	6	0	199	0	9	10
15	208	7	2	5	210	11	3	0	213	3	5	5
16	222	6	1	0	225	0	0	0	227	6	1	0
17	236	4	11	6	239	0	9	0	241	8	8	6
18	250	3	10	1	253	1	6	0	255	11	4	1
19	264	2	8	8	267	2	3	0	270	1	11	8
20	278	1	7	3	281	3	0	0	284	4	7	3
21	292	0	5	9	295	3	9	0	298	7	2	9
22	305	11	4	4	309	4	6	0	312	9	10	4
23	319	10	2	11	323	5	3	0	327	0	5	11
24	333	9	1	6	337	6	0	0	341	3	1	6
25	347	8	0	0	351	6	9	0	355	5	9	0
26	361	6	10	7	365	7	6	0	369	8	4	7
27	375	5	9	2	379	8	3	0	383	11	0	2
28	389	4	7	9	393	9	0	0	398	1	7	9
29	403	3	6	3	407	9	9	0	412	4	3	3
30	417	2	4	10	421	10	6	0	426	6	10	10
31	431	1	3	5	435	11	3	0	440	9	6	5
32	445	0	2	0	450	0	0	0	455	0	2	0
33	458	11	0	6	464	0	9	0	469	2	9	6
34	472	9	11	1	478	1	6	0	483	5	5	1
35	486	8	9	8	492	2	3	0	497	8	0	8
36	500	7	8	3	506	3	0	0	511	10	8	3
37	514	6	6	9	520	3	9	0	526	1	3	9
38	528	5	5	4	534	4	6	0	540	3	11	4
39	542	4	3	11	548	5	3	0	554	6	6	11
40	556	3	2	6	562	6	0	0	568	9	2	6
80	1112	6	5	0	1125	0	0	0	1137	6	5	0

Feet Long.	Side 45⅛ In.				Side 45⅜ In.				Side 46 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	3	7	1	6	3	7	7	3	3	8	1	0
½	7	2	3	1	7	3	2	6	7	4	2	0
¾	10	9	4	8	10	10	9	9	11	0	3	0
1	14	4	6	3	14	6	5	0	14	8	4	0
2	28	9	0	6	29	0	10	1	29	4	8	0
3	43	1	6	9	43	7	3	2	44	1	0	0
4	57	6	1	0	58	1	8	3	58	9	4	0
5	71	10	7	3	72	8	1	3	73	5	8	0
6	86	3	1	6	87	2	6	4	88	2	0	0
7	100	7	7	9	101	8	11	5	102	10	4	0
8	115	0	2	0	116	3	4	6	117	6	8	0
9	129	4	8	3	130	9	9	6	132	3	0	0
10	143	9	2	6	145	4	2	7	146	11	4	0
11	158	1	8	9	159	10	7	8	161	7	8	0
12	172	6	3	0	174	5	0	9	176	4	0	0
13	186	10	9	3	188	11	5	9	191	0	4	0
14	201	3	3	6	203	5	10	10	205	8	8	0
15	215	7	9	9	218	0	3	11	220	5	0	0
16	230	0	4	0	232	6	9	0	235	1	4	0
17	244	4	10	3	247	1	2	0	249	9	8	0
18	258	9	4	6	261	7	7	1	264	6	0	0
19	273	1	10	9	276	2	0	2	279	2	4	0
20	287	6	5	0	290	8	5	3	293	10	8	0
21	301	10	11	3	305	2	10	3	308	7	0	0
22	316	3	5	6	319	9	3	4	323	3	4	0
23	330	7	11	9	334	3	8	5	337	11	8	0
24	345	0	6	0	348	10	1	6	352	8	0	0
25	359	5	0	3	363	4	6	6	367	4	4	0
26	373	9	6	6	377	10	11	7	382	0	8	0
27	388	2	0	9	392	5	4	8	396	9	0	0
28	402	6	7	0	406	11	9	9	411	5	4	0
29	416	11	1	3	421	6	2	9	426	1	8	0
30	431	3	7	6	436	0	7	10	440	10	0	0
31	445	8	1	9	450	7	0	11	455	6	4	0
32	460	0	8	0	465	1	6	0	470	2	8	0
33	474	5	2	3	479	7	11	0	484	11	0	0
34	488	9	8	6	494	2	4	1	499	7	4	0
35	503	2	2	9	508	8	9	2	514	3	8	0
36	517	6	9	0	523	3	2	3	529	0	0	0
37	531	11	3	3	537	9	7	3	543	8	4	0
38	546	3	9	6	552	4	0	4	558	4	8	0
39	560	8	3	9	566	10	5	5	573	1	0	0
40	575	0	10	0	581	4	10	6	587	9	4	0
80	1150	1	8	0	1162	9	9	0	1175	6	8	0

Feet Long.	Side 46¼ In.				Side 46½ In.				Side 46¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	3	8	6	9	3	9	0	6	3	9	6	4
½	7	5	1	6	7	6	1	1	7	7	0	9
¾	11	1	8	3	11	3	1	8	11	4	7	2
1	14	10	3	0	15	0	2	3	15	2	1	6
2	29	8	6	1	30	0	4	6	30	4	3	1
3	44	6	9	2	45	0	6	9	45	6	4	8
4	59	5	0	3	60	0	9	0	60	8	6	3
5	74	3	3	3	75	0	11	3	75	10	7	9
6	89	1	6	4	90	1	1	6	91	0	9	4
7	103	11	9	5	105	1	3	9	106	2	10	11
8	118	10	0	6	120	1	6	0	121	5	0	6
9	133	8	3	6	135	1	8	3	136	7	2	0
10	148	6	6	7	150	1	10	6	151	9	3	7
11	163	4	9	8	165	2	0	9	166	11	5	2
12	178	3	0	9	180	2	3	0	182	1	6	9
13	193	1	3	9	195	2	5	3	197	3	8	3
14	207	11	6	10	210	2	7	6	212	5	9	10
15	222	9	9	11	225	2	9	9	227	7	11	5
16	237	8	1	0	240	3	0	0	242	10	1	0
17	252	6	4	0	255	3	2	3	258	0	2	6
18	267	4	7	1	270	3	4	6	273	2	4	1
19	282	2	10	2	285	3	6	9	288	4	5	8
20	297	1	1	3	300	3	9	0	303	6	7	3
21	311	11	4	3	315	3	11	3	318	8	8	9
22	326	9	7	4	330	4	1	6	333	10	10	4
23	341	7	10	5	345	4	3	9	349	0	11	11
24	356	6	1	6	360	4	6	0	364	3	1	6
25	371	4	4	6	375	4	8	3	379	5	3	0
26	386	2	7	7	390	4	10	6	394	7	4	7
27	401	0	10	8	405	5	0	9	409	9	6	2
28	415	11	1	9	420	5	3	0	424	11	7	9
29	430	9	4	9	435	5	5	3	440	1	9	3
30	445	7	7	10	450	5	7	6	455	3	10	10
31	460	5	10	11	465	5	9	9	470	6	0	5
32	475	4	2	0	480	6	0	0	485	8	2	0
33	490	2	5	0	495	6	2	3	500	10	3	6
34	505	0	8	1	510	6	4	6	516	0	5	1
35	519	10	11	2	525	6	6	9	531	2	6	8
36	534	9	2	3	540	6	9	0	546	4	8	3
37	549	7	5	3	555	6	11	3	561	6	9	9
38	564	5	8	4	570	7	1	6	576	8	11	4
39	579	3	11	5	585	7	3	9	591	11	0	11
40	594	2	2	6	600	7	6	0	607	1	2	6
80	1188	4	5	0	1201	3	0	0	1214	2	5	0

Feet Long.	Side 47 In.				Side 47¼ In.				Side 47½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	3	10	0	3	3	10	6	1	3	11	0	0
½	7	8	0	6	7	9	0	3	7	10	0	1
¾	11	6	0	9	11	7	6	5	11	9	0	2
1	15	4	1	0	15	6	0	6	15	8	0	3
2	30	8	2	0	31	0	1	1	31	4	0	6
3	46	0	3	0	46	6	1	8	47	0	0	9
4	61	4	4	0	62	0	2	3	62	8	1	0
5	76	8	5	0	77	6	2	9	78	4	1	3
6	92	0	6	0	93	0	3	4	94	0	1	6
7	107	4	7	0	108	6	3	11	109	8	1	9
8	122	8	8	0	124	0	4	6	125	4	2	0
9	138	0	9	0	139	6	5	0	141	0	2	3
10	153	4	10	0	155	0	5	7	156	8	2	6
11	168	8	11	0	170	6	6	2	172	4	2	9
12	184	1	0	0	186	0	6	9	188	0	3	0
13	199	5	1	0	201	6	7	3	203	8	3	3
14	214	9	2	0	217	0	7	10	219	4	3	6
15	230	1	3	0	232	6	8	5	235	0	3	9
16	245	5	4	0	248	0	9	0	250	8	4	0
17	260	9	5	0	263	6	9	6	266	4	4	3
18	276	1	6	0	279	0	10	1	282	0	4	6
19	291	5	7	0	294	6	10	8	297	8	4	9
20	306	9	8	0	310	0	11	3	313	4	5	0
21	322	1	9	0	325	6	11	9	329	0	5	3
22	337	5	10	0	341	1	0	4	344	8	5	6
23	352	9	11	0	356	7	0	11	360	4	5	9
24	368	2	0	0	372	1	1	6	376	0	6	0
25	383	6	1	0	387	7	2	0	391	8	6	3
26	398	10	2	0	403	1	2	7	407	4	6	6
27	414	2	3	0	418	7	3	2	423	0	6	9
28	429	6	4	0	434	1	3	9	438	8	7	0
29	444	10	5	0	449	7	4	3	454	4	7	3
30	460	2	6	0	465	1	4	10	470	0	7	6
31	475	6	7	0	480	7	5	5	485	8	7	9
32	490	10	8	0	496	1	6	0	501	4	8	0
33	506	2	9	0	511	7	6	6	517	0	8	3
34	521	6	10	0	527	1	7	1	532	8	8	6
35	536	10	11	0	542	7	7	8	548	4	8	9
36	552	3	0	0	558	1	8	3	564	0	9	0
37	567	7	1	0	573	7	8	9	579	8	9	3
38	582	11	2	0	589	1	9	4	595	4	9	6
39	598	3	3	0	604	7	9	11	611	0	9	9
40	613	7	4	0	620	1	10	6	626	8	10	0
80	1227	2	8	0	1240	3	9	0	1253	5	8	0

Feet Long.	Side 47⅝ In.				Side 48 In.				Side 48¼ In.			
	Ft.	In.	Pts.	2ds	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	3	11	6	0	4	0	0	0	4	0	6	0
½	7	11	0	0	8	0	0	0	8	1	0	0
¾	11	10	6	0	12	0	0	0	12	1	6	0
1	15	10	0	0	16	0	0	0	16	2	0	0
2	31	8	0	1	32	0	0	0	32	4	0	1
3	47	6	0	2	48	0	0	0	48	6	0	2
4	63	4	0	3	64	0	0	0	64	8	0	3
5	79	2	0	3	80	0	0	0	80	10	0	3
6	95	0	0	4	96	0	0	0	97	0	0	4
7	110	10	0	5	112	0	0	0	113	2	0	5
8	126	8	0	6	128	0	0	0	129	4	0	6
9	142	6	0	6	144	0	0	0	145	6	0	6
10	158	4	0	7	160	0	0	0	161	8	0	7
11	174	2	0	8	176	0	0	0	177	10	0	8
12	190	0	0	9	192	0	0	0	194	0	0	9
13	205	10	0	9	208	0	0	0	210	2	0	9
14	221	8	0	10	224	0	0	0	226	4	0	10
15	237	6	0	11	240	0	0	0	242	6	0	11
16	253	4	1	0	256	0	0	0	258	8	1	0
17	269	2	1	0	272	0	0	0	274	10	1	0
18	285	0	1	1	288	0	0	0	291	0	1	1
19	300	10	1	2	304	0	0	0	307	2	1	2
20	316	8	1	3	320	0	0	0	323	4	1	3
21	332	6	1	3	336	0	0	0	339	6	1	3
22	348	4	1	4	352	0	0	0	355	8	1	4
23	364	2	1	5	368	0	0	0	371	10	1	5
24	380	0	1	6	384	0	0	0	388	0	1	6
25	395	10	1	6	400	0	0	0	404	2	1	6
26	411	8	1	7	416	0	0	0	420	4	1	7
27	427	6	1	8	432	0	0	0	436	6	1	8
28	443	4	1	9	448	0	0	0	452	8	1	9
29	459	2	1	9	464	0	0	0	468	10	1	9
30	475	0	1	10	480	0	0	0	485	0	1	10
31	490	10	1	11	496	0	0	0	501	2	1	11
32	506	8	2	0	512	0	0	0	517	4	2	0
33	522	6	2	0	528	0	0	0	533	6	2	0
34	538	4	2	1	544	0	0	0	549	8	2	1
35	554	2	2	2	560	0	0	0	565	10	2	2
36	570	0	2	3	576	0	0	0	582	0	2	3
37	585	10	2	3	592	0	0	0	598	2	2	3
38	601	8	2	4	608	0	0	0	614	4	2	4
39	617	6	2	5	624	0	0	0	630	6	2	5
40	633	4	2	6	640	0	0	0	646	8	2	6
80	1266	8	5	0	1280	0	0	0	1293	4	5	0

Feet Long.	Side 48½ In.				Side 48¾ In.				Side 49 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	4	1	0	0	4	1	6	1	4	2	0	3
½	8	2	0	1	8	3	0	3	8	4	0	6
¾	12	3	0	2	12	4	6	5	12	6	0	9
1	16	4	0	3	16	6	0	6	16	8	1	0
2	32	8	0	6	33	0	1	1	33	4	2	0
3	49	0	0	9	49	6	1	8	50	0	3	0
4	65	4	1	0	66	0	2	3	66	8	4	0
5	81	8	1	3	82	6	2	9	83	4	5	0
6	98	0	1	6	99	0	3	4	100	0	6	0
7	114	4	1	9	115	6	3	11	116	8	7	0
8	130	8	2	0	132	0	4	6	133	4	8	0
9	147	0	2	3	148	6	5	0	150	0	9	0
10	163	4	2	6	165	0	5	7	166	8	10	0
11	179	8	2	9	181	6	6	2	183	4	11	0
12	196	0	3	0	198	0	6	9	200	1	0	0
13	212	4	3	3	214	6	7	3	216	9	1	0
14	228	8	3	6	231	0	7	10	233	5	2	0
15	245	0	3	9	247	6	8	5	250	1	3	0
16	261	4	4	0	264	0	9	0	266	9	4	0
17	277	8	4	3	280	6	9	6	283	5	5	0
18	294	0	4	6	297	0	10	1	300	1	6	0
19	310	4	4	9	313	6	10	8	316	9	7	0
20	326	8	5	0	330	0	11	3	333	5	8	0
21	343	0	5	3	346	6	11	9	350	1	9	0
22	359	4	5	6	363	1	0	4	366	9	10	0
23	375	8	5	9	379	7	0	11	383	5	11	0
24	392	0	6	0	396	1	1	6	400	2	0	0
25	408	4	6	3	412	7	2	0	416	10	1	0
26	424	8	6	6	429	1	2	7	433	6	2	0
27	441	0	6	9	445	7	3	2	450	2	3	0
28	457	4	7	0	462	1	3	9	466	10	4	0
29	473	8	7	3	478	7	4	3	483	6	5	0
30	490	0	7	6	495	1	4	10	500	2	6	0
31	506	4	7	9	511	7	5	5	516	10	7	0
32	522	8	8	0	528	1	6	0	533	6	8	0
33	539	0	8	3	544	7	6	6	550	2	9	0
34	555	4	8	6	561	1	7	1	566	10	10	0
35	571	8	8	9	577	7	7	8	583	6	11	0
36	588	0	9	0	594	1	8	3	600	3	0	0
37	604	4	9	3	610	7	8	9	616	11	1	0
38	620	8	9	6	627	1	9	4	633	7	2	0
39	637	0	9	9	643	7	9	11	650	3	3	0
40	653	4	10	0	660	1	10	6	666	11	4	0
80	1306	9	8	0	1320	3	9	0	1333	10	8	0

Feet Long.	Side 49¼ In.				Side 49½ In.				Side 49¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	4	2	6	4	4	3	0	6	4	3	6	9
½	8	5	0	9	8	6	1	1	8	7	1	6
¾	12	7	7	2	12	9	1	8	12	10	8	3
1	16	10	1	6	17	0	2	5	17	2	3	0
2	33	8	3	1	34	0	4	6	34	4	6	1
3	50	6	4	8	51	0	6	9	51	6	9	2
4	67	4	6	3	68	0	9	0	68	9	0	3
5	84	2	7	9	85	0	11	3	85	11	3	3
6	101	0	9	4	102	1	1	6	103	1	6	4
7	117	10	10	11	119	1	3	9	120	3	9	5
8	134	9	0	6	136	1	6	0	137	6	0	6
9	151	7	2	0	153	1	8	3	154	8	3	6
10	168	5	3	7	170	1	10	6	171	10	6	7
11	185	3	5	2	187	2	0	9	189	0	9	8
12	202	1	6	9	204	2	3	0	206	3	0	9
13	218	11	8	3	221	2	5	3	223	5	3	9
14	235	9	9	10	238	2	7	6	240	7	6	10
15	252	7	11	5	255	2	9	9	257	9	9	11
16	269	6	1	0	272	3	0	0	275	0	1	0
17	286	4	2	6	289	3	2	3	292	2	4	0
18	303	2	4	1	306	3	4	6	309	4	7	1
19	320	0	5	8	323	3	6	9	326	6	10	2
20	336	10	7	3	340	3	9	0	343	9	1	3
21	353	8	8	9	357	3	11	3	360	11	4	3
22	370	6	10	4	374	4	1	6	378	1	7	4
23	387	4	11	11	391	4	3	9	395	3	10	5
24	404	3	1	6	408	4	6	0	412	6	1	6
25	421	1	3	0	425	4	8	3	429	8	4	6
26	437	11	4	7	442	4	10	6	446	10	7	7
27	454	9	6	2	459	5	0	9	464	0	10	8
28	471	7	7	9	476	5	3	0	481	3	1	9
29	488	5	9	3	493	5	5	3	498	5	4	9
30	505	3	10	10	510	5	7	6	515	7	7	10
31	522	2	0	5	527	5	9	9	532	9	10	11
32	539	0	2	0	544	6	0	0	550	0	2	0
33	555	10	3	6	561	6	2	3	567	2	5	0
34	572	8	5	1	578	6	4	6	584	4	8	1
35	589	6	6	8	595	6	6	9	601	6	11	2
36	606	4	8	3	612	6	9	0	618	9	2	3
37	623	2	9	9	629	6	11	3	635	11	5	3
38	640	0	11	4	646	7	1	6	653	1	8	4
39	656	11	0	11	663	7	3	9	670	3	11	5
40	673	9	2	6	680	7	6	0	687	6	2	6
80	1347	6	5	0	1361	3	0	0	1375	0	5	0

Feet Long.	Side 50 In.				Side 50¼ In.				Side 50½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	4	4	1	0	4	4	7	3	4	5	1	6
½	8	8	2	0	8	9	2	6	8	10	3	1
¾	13	0	3	0	13	1	9	9	13	3	4	8
1	17	4	4	0	17	6	5	0	17	8	6	3
2	34	8	8	0	35	0	10	1	35	5	0	6
3	52	1	0	0	52	7	3	2	53	1	6	9
4	69	5	4	0	70	1	8	3	70	10	1	0
5	86	9	8	0	87	8	1	3	88	6	7	3
6	104	2	0	0	105	2	6	4	106	3	1	6
7	121	6	4	0	122	8	11	5	123	11	7	9
8	138	10	8	0	140	3	4	6	141	8	2	0
9	156	3	0	0	157	9	9	6	159	4	8	3
10	173	7	4	0	175	4	2	7	177	1	2	6
11	190	11	8	0	192	10	7	8	194	9	8	9
12	208	4	0	0	210	5	0	9	212	6	3	0
13	225	8	4	0	227	11	5	9	230	2	9	3
14	243	0	8	0	245	5	10	10	247	11	3	6
15	260	5	0	0	263	0	3	11	265	7	9	9
16	277	9	4	0	280	6	9	0	283	4	4	0
17	295	1	8	0	298	1	2	0	301	0	10	3
18	312	6	0	0	315	7	7	1	318	9	4	6
19	329	10	4	0	333	2	0	2	336	5	10	9
20	347	2	8	0	350	8	5	3	354	2	5	0
21	364	7	0	0	368	2	10	3	371	10	11	3
22	381	11	4	0	385	9	3	4	389	7	5	6
23	399	3	8	0	403	3	8	5	407	3	11	9
24	416	8	0	0	420	10	1	6	425	0	6	0
25	434	0	4	0	438	4	6	6	442	9	0	3
26	451	4	8	0	455	10	11	7	460	5	6	6
27	468	9	0	0	473	5	4	8	478	2	0	9
28	486	1	4	0	490	11	9	9	495	10	7	0
29	503	5	8	0	508	6	2	9	513	7	1	3
30	520	10	0	0	526	0	7	10	531	3	7	6
31	538	2	4	0	543	7	0	11	549	0	1	9
32	555	6	8	0	561	1	6	0	566	8	8	0
33	572	11	0	0	578	7	11	0	584	5	2	3
34	590	3	4	0	596	2	4	1	602	1	8	6
35	607	7	8	0	613	8	9	2	619	10	2	9
36	625	0	0	0	631	3	2	3	637	6	9	0
37	642	4	4	0	648	9	7	3	655	3	3	3
38	659	8	8	0	666	4	0	4	672	11	9	6
39	677	1	0	0	683	10	5	5	690	8	3	9
40	694	5	4	0	701	4	10	6	708	4	10	0
80	1388	10	8	0	1402	9	9	0	1416	9	8	0

Feet Long.	Side 50¾ In.				Side 51 In.				Side 51¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In	Pts.	2ds.
¼	4	5	7	10	4	6	2	3	4	6	8	7
½	8	11	3	9	9	0	4	6	9	1	5	3
¾	13	4	11	8	13	6	6	9	13	8	1	11
1	17	10	7	6	18	0	9	0	18	2	10	6
2	35	9	3	1	36	1	6	0	36	5	9	1
3	53	7	10	8	54	2	3	0	54	8	7	8
4	71	6	6	3	72	3	0	0	72	11	6	3
5	89	5	1	9	90	3	9	0	91	2	4	9
6	107	3	9	4	108	4	6	0	109	5	3	4
7	125	2	4	11	126	5	3	0	127	8	1	11
8	143	1	0	6	144	6	0	0	145	11	0	6
9	160	11	8	0	162	6	9	0	164	1	11	0
10	178	10	3	7	180	7	6	0	182	4	9	7
11	196	8	11	2	198	8	3	0	200	7	8	2
12	214	7	6	9	216	9	0	0	218	10	6	9
13	232	6	2	3	234	9	9	0	237	1	5	3
14	250	4	9	10	252	10	6	0	255	4	3	10
15	268	3	5	5	270	11	3	0	273	7	2	5
16	286	2	1	0	289	0	0	0	291	10	1	0
17	304	0	8	6	307	0	9	0	310	0	11	6
18	321	11	4	1	325	1	6	0	328	3	10	1
19	339	9	11	8	343	2	3	0	346	6	8	8
20	357	8	7	3	361	3	0	0	364	9	7	3
21	375	7	2	9	379	3	9	0	383	0	5	9
22	393	5	10	4	397	4	6	0	401	3	4	4
23	411	4	5	11	415	5	3	0	419	6	2	11
24	429	3	1	6	433	6	0	0	437	9	1	6
25	447	1	9	0	451	6	9	0	456	0	0	0
26	465	0	4	7	469	7	6	0	474	2	10	7
27	482	11	0	2	487	8	3	0	492	5	9	2
28	500	9	7	9	505	9	0	0	510	8	7	9
29	518	8	3	3	523	9	9	0	528	11	6	3
30	536	6	10	10	541	10	6	0	547	2	4	10
31	554	5	6	5	559	11	3	0	565	5	3	5
32	572	4	2	0	578	0	0	0	583	8	2	0
33	590	2	9	6	596	0	9	0	601	11	0	6
34	608	1	5	1	614	1	6	0	620	1	11	1
35	626	0	0	8	632	2	3	0	638	4	9	8
36	643	10	8	3	650	3	0	0	656	7	8	3
37	661	9	3	9	668	3	9	0	674	10	6	9
38	679	7	11	4	686	4	6	0	693	1	5	4
39	697	6	6	11	704	5	3	0	711	4	3	11
40	715	5	2	6	722	6	0	0	729	7	2	6
80	1430	10	5	0	1445	0	0	0	1459	2	5	0

Feet Long.	Side 51⅛ In.				Side 51¾ In.				Side 52 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	4	7	3	0	4	7	9	6	4	8	4	0
½	9	2	6	1	9	3	7	0	9	4	8	0
¾	13	9	9	2	13	11	4	6	14	1	0	0
1	18	5	0	3	18	7	2	0	18	9	4	0
2	36	10	0	6	37	2	4	1	37	6	8	0
3	55	3	0	9	55	9	6	2	56	4	0	0
4	73	8	1	0	74	4	8	3	75	1	4	0
5	92	1	1	3	92	11	10	3	93	10	8	0
6	110	6	1	6	111	7	0	4	112	8	0	0
7	128	11	1	9	130	2	2	5	131	5	4	0
8	147	4	2	0	148	9	4	6	150	2	8	0
9	165	9	2	3	167	4	6	6	169	0	0	0
10	184	2	2	6	185	11	8	7	187	9	4	0
11	202	7	2	9	204	6	10	8	206	6	8	0
12	221	0	3	0	223	2	0	9	225	4	0	0
13	239	5	3	3	241	9	2	9	244	1	4	0
14	257	10	3	6	260	4	4	10	262	10	8	0
15	276	3	3	9	278	11	6	11	281	8	0	0
16	294	8	4	0	297	6	9	0	300	5	4	0
17	313	1	4	3	316	1	11	0	319	2	8	0
18	331	6	4	6	334	9	1	1	338	0	0	0
19	349	11	4	9	353	4	3	2	356	9	4	0
20	368	4	5	0	371	11	5	3	375	6	8	0
21	386	9	5	3	390	6	7	3	394	4	0	0
22	405	2	5	6	409	1	9	4	413	1	4	0
23	423	7	5	9	427	8	11	5	431	10	8	0
24	442	0	6	0	446	4	1	6	450	8	0	0
25	460	5	6	3	464	11	3	6	469	5	4	0
26	478	10	6	6	483	6	5	7	488	2	8	0
27	497	3	6	9	502	1	7	8	507	0	0	0
28	515	8	7	0	520	8	9	9	525	9	4	0
29	534	1	7	3	539	3	11	9	544	6	8	0
30	552	6	7	6	557	11	1	10	563	4	0	0
31	570	11	7	9	576	6	3	11	582	1	4	0
32	589	4	8	0	595	1	6	0	600	10	8	0
33	607	9	8	3	613	8	8	0	619	8	0	0
34	626	2	8	6	632	3	10	1	638	5	4	0
35	644	7	8	9	650	11	0	2	657	2	8	0
36	663	0	9	0	669	6	2	3	676	0	0	0
37	681	5	9	3	688	1	4	3	694	9	4	0
38	699	10	9	6	706	8	6	4	713	6	8	0
39	718	3	9	9	725	3	8	5	732	4	0	0
40	736	8	10	0	743	10	10	6	751	1	4	0
80	1473	5	8	0	1487	9	9	0	1502	2	8	0

Feet Long.	Side 52½ In.				Side 52⅝ In.				Side 52¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	4	8	10	6	4	9	5	0	4	9	11	7
½	9	5	9	0	9	6	10	1	9	7	11	3
¾	14	2	7	6	14	4	3	2	14	5	10	11
1	18	11	6	0	19	1	8	3	19	3	10	6
2	37	11	0	1	38	3	4	6	38	7	9	1
3	56	10	6	2	57	5	0	9	57	11	7	8
4	75	10	0	3	76	6	9	0	77	3	6	3
5	94	9	6	3	95	8	5	3	96	7	4	9
6	113	9	0	4	114	10	1	6	115	11	3	4
7	132	8	6	5	133	11	9	9	135	3	1	11
8	151	8	0	6	153	1	6	0	154	7	0	6
9	170	7	6	6	172	3	2	3	173	10	11	0
10	189	7	0	7	191	4	10	6	193	2	9	7
11	208	6	6	8	210	6	6	9	212	6	8	2
12	227	6	0	9	229	8	3	0	231	10	6	9
13	246	5	6	9	248	9	11	3	251	2	5	3
14	265	5	0	10	267	11	7	6	270	6	3	10
15	284	4	6	11	287	1	3	9	289	10	2	5
16	303	4	1	0	306	3	0	0	309	2	1	0
17	322	3	7	0	325	4	8	3	328	5	11	6
18	341	3	1	1	344	6	4	6	347	9	10	1
19	360	2	7	2	363	8	0	9	367	1	8	8
20	379	2	1	3	382	9	9	0	386	5	7	3
21	398	1	7	3	401	11	5	3	405	9	5	9
22	417	1	1	4	421	1	1	6	425	1	4	4
23	436	0	7	5	440	2	9	9	444	5	2	11
24	455	0	1	6	459	4	6	0	463	9	1	6
25	473	11	7	6	478	6	2	3	483	1	0	0
26	492	11	1	7	497	7	10	6	502	4	10	7
27	511	10	7	8	516	9	6	9	521	8	9	2
28	530	10	1	9	535	11	3	0	541	0	7	9
29	549	9	7	9	555	0	11	3	560	4	6	3
30	568	9	1	10	574	2	7	6	579	8	4	10
31	587	8	7	11	593	4	3	9	599	0	3	5
32	606	8	2	0	612	6	0	0	618	4	2	0
33	625	7	8	0	631	7	8	3	637	8	0	6
34	644	7	2	1	650	9	4	6	656	11	11	1
35	663	6	8	2	669	11	0	9	676	3	9	8
36	682	6	2	3	689	0	9	0	695	7	8	3
37	701	5	8	3	708	2	5	3	714	11	6	9
38	720	5	2	4	727	4	1	6	734	3	5	4
39	739	4	8	5	746	5	9	9	753	7	3	11
40	758	4	2	6	765	7	6	0	772	11	2	6
80	1516	8	5	0	1531	3	0	0	1545	10	5	0

Feet Long.	Side 53 In.				Side 53¼ In.				Side 53½ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	4	10	6	3	4	11	0	10	4	11	7	6
½	9	9	0	6	9	10	1	9	9	11	3	1
¾	14	7	6	9	14	9	2	8	14	10	10	8
1	19	6	1	0	19	8	3	6	19	10	6	3
2	39	0	2	0	39	4	7	1	39	9	0	6
3	58	6	3	0	59	0	10	8	59	7	6	9
4	78	0	4	0	78	9	2	3	79	6	1	0
5	97	6	5	0	98	5	5	9	99	4	7	3
6	117	0	6	0	118	1	9	4	119	3	1	6
7	136	6	7	0	137	10	0	11	139	1	7	9
8	156	0	8	0	157	6	4	6	159	0	2	0
9	175	6	9	0	177	2	8	0	178	10	8	3
10	195	0	10	0	196	10	11	7	198	9	2	6
11	214	6	11	0	216	7	3	2	218	7	8	9
12	234	1	0	0	236	3	6	9	238	6	3	0
13	253	7	1	0	255	11	10	3	258	4	9	3
14	273	1	2	0	275	8	1	10	278	3	3	6
15	292	7	3	0	295	4	5	5	298	1	9	9
16	312	1	4	0	315	0	9	0	318	0	4	0
17	331	7	5	0	334	9	0	6	337	10	10	3
18	351	1	6	0	354	5	4	1	357	9	4	6
19	370	7	7	0	374	1	7	8	377	7	10	9
20	390	1	8	0	393	9	11	3	397	6	5	0
21	409	7	9	0	413	6	2	9	417	4	11	3
22	429	1	10	0	433	2	6	4	437	3	5	6
23	448	7	11	0	452	10	9	11	459	1	11	9
24	468	2	0	0	472	7	1	6	477	0	6	0
25	487	8	1	0	492	3	5	0	496	11	0	3
26	507	2	2	0	511	11	8	7	516	9	6	6
27	526	8	3	0	531	8	0	2	536	8	0	9
28	546	2	4	0	551	4	3	9	556	6	7	0
29	565	8	5	0	571	0	7	3	576	5	1	3
30	585	2	6	0	590	8	10	10	596	3	7	6
31	604	8	7	0	610	5	2	5	616	2	1	9
32	624	2	8	0	630	1	6	0	636	0	8	0
33	643	8	9	0	649	9	9	6	655	11	2	3
34	663	2	10	0	669	6	1	1	675	9	8	6
35	682	8	11	0	689	2	4	8	695	8	2	9
36	702	3	0	0	708	10	8	3	715	6	9	0
37	721	9	1	0	728	6	11	9	735	5	3	3
38	741	3	2	0	748	3	3	4	755	3	9	6
39	760	9	3	0	767	11	6	11	775	2	3	9
40	780	3	4	0	787	7	10	6	795	0	10	0
80	1560	6	8	0	1575	3	9	0	1590	1	8	0

Feet Long.	Side 53¾ In.				Side 54 In.				Side 54¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	5	0	2	3	5	0	9	0	5	1	3	9
½	10	0	4	6	10	1	6	0	10	2	7	6
¾	15	0	6	9	15	2	3	0	15	3	11	3
1	20	0	9	0	20	3	0	0	20	5	3	0
2	40	1	6	1	40	6	0	0	40	10	6	1
3	60	2	3	2	60	9	0	0	61	3	9	2
4	80	3	0	3	81	0	0	0	81	9	0	3
5	100	3	9	3	101	3	0	0	102	2	3	3
6	120	4	6	4	121	6	0	0	122	7	6	4
7	140	5	3	5	141	9	0	0	143	0	9	5
8	160	6	0	6	162	0	0	0	163	6	0	6
9	180	6	9	6	182	3	0	0	183	11	3	6
10	200	7	6	7	202	6	0	0	204	4	6	7
11	220	8	3	8	222	9	0	0	224	9	9	8
12	240	9	0	9	243	0	0	0	245	3	0	9
13	260	9	9	9	263	3	0	0	265	8	3	9
14	280	10	6	10	283	6	0	0	286	1	6	10
15	300	11	3	11	303	9	0	0	306	6	9	11
16	321	0	1	0	324	0	0	0	327	0	1	0
17	341	0	10	0	344	3	0	0	347	5	4	0
18	361	1	7	1	364	6	0	0	367	10	7	1
19	381	2	4	2	384	9	0	0	388	3	10	2
20	401	3	1	3	405	0	0	0	408	9	1	3
21	421	3	10	3	425	3	0	0	429	2	4	3
22	441	4	7	4	445	6	0	0	449	7	7	4
23	461	5	4	5	465	9	0	0	470	0	10	5
24	481	6	1	6	486	0	0	0	490	6	1	6
25	501	6	10	6	506	3	0	0	510	11	4	6
26	521	7	7	7	526	6	0	0	531	4	7	7
27	541	8	4	8	546	9	0	0	551	9	10	8
28	561	9	1	9	567	0	0	0	572	3	1	9
29	581	9	10	9	587	3	0	0	592	8	4	9
30	601	10	7	10	607	6	0	0	613	1	7	10
31	621	11	4	11	627	9	0	0	633	6	10	11
32	642	0	2	0	648	0	0	0	654	0	2	0
33	662	0	11	0	668	3	0	0	674	5	5	0
34	682	1	8	1	688	6	0	0	694	10	8	1
35	702	2	5	2	708	9	0	0	715	3	11	2
36	722	3	2	3	729	0	0	0	735	9	2	3
37	742	3	11	3	749	3	0	0	756	2	5	3
38	762	4	8	4	769	6	0	0	776	7	8	4
39	782	5	5	5	789	9	0	0	797	0	11	5
40	802	6	2	6	810	0	0	0	817	6	2	6
80	1605	0	5	0	1620	0	0	0	1635	0	5	0

Feet Long.	Side 54⅛ In.				Side 54⅜ In.				Side 55 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	5	1	10	6	5	2	5	4	5	3	0	3
½	10	3	9	1	10	4	10	9	10	6	0	6
¾	15	5	7	8	15	7	4	2	15	9	0	9
1	20	7	6	3	20	9	9	6	21	0	1	0
2	41	3	0	6	41	7	7	1	42	0	2	0
3	61	10	6	9	62	5	4	8	63	0	3	0
4	82	6	1	0	83	3	2	3	84	0	4	0
5	103	1	7	3	104	0	11	9	105	0	5	0
6	123	9	1	6	124	10	9	4	126	0	6	0
7	144	4	7	9	145	8	6	11	147	0	7	0
8	165	0	2	0	166	6	4	6	168	0	8	0
9	185	7	8	3	187	4	2	0	189	0	9	0
10	206	3	2	6	208	1	11	7	210	0	10	0
11	226	10	8	9	228	11	9	2	231	0	11	0
12	247	6	3	0	249	9	6	9	252	1	0	0
13	268	1	9	3	270	7	4	3	273	1	1	0
14	288	9	3	6	291	5	1	10	294	1	2	0
15	309	4	9	9	312	2	11	5	315	1	3	0
16	330	0	4	0	333	0	9	0	336	1	4	0
17	350	7	10	3	353	10	6	6	357	1	5	0
18	371	3	4	6	374	8	4	1	378	1	6	0
19	391	10	10	9	395	6	1	8	399	1	7	0
20	412	6	5	0	416	3	11	3	420	1	8	0
21	433	1	11	3	437	1	8	9	441	1	9	0
22	453	9	5	6	457	11	6	4	462	1	10	0
23	474	4	11	9	478	9	3	11	483	1	11	0
24	495	0	6	0	499	7	1	6	504	2	0	0
25	515	8	0	3	520	4	11	0	525	2	1	0
26	536	3	6	6	541	2	8	7	546	2	2	0
27	556	11	0	9	562	0	6	2	567	2	3	0
28	577	6	7	0	582	10	3	9	588	2	4	0
29	598	2	1	3	603	8	1	3	609	2	5	0
30	618	9	7	6	624	5	10	10	630	2	6	0
31	639	5	1	9	645	3	8	5	651	2	7	0
32	660	0	8	0	666	1	6	0	672	2	8	0
33	680	8	2	3	686	11	3	6	693	2	9	0
34	701	3	8	6	707	9	1	1	714	2	10	0
35	721	11	2	9	728	6	10	8	735	2	11	0
36	742	6	9	0	749	4	8	3	756	3	0	0
37	763	2	3	3	770	2	5	9	777	3	1	0
38	783	9	9	6	791	0	3	4	798	3	2	0
39	804	5	3	9	811	10	0	11	819	3	3	0
40	825	0	10	0	832	7	10	6	840	3	4	0
80	1650	1	8	0	1665	3	9	0	1680	6	8	0

Feet Long.	Side 55¼ In.				Side 55½ In.				Side 55¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	5	3	7	1	5	4	2	0	5	4	9	0
½	10	7	2	3	10	8	4	1	10	9	6	0
¾	15	10	9	5	16	0	6	2	16	2	3	0
1	21	2	4	6	21	4	8	3	21	7	0	0
2	42	4	9	1	42	9	4	6	43	2	0	1
3	63	7	1	8	64	2	0	9	64	9	0	2
4	84	9	6	3	85	6	9	0	86	4	0	3
5	105	11	10	9	106	11	5	3	107	11	0	3
6	127	2	3	4	128	4	1	6	129	6	0	4
7	148	4	7	11	149	8	9	9	151	1	0	5
8	169	7	0	6	171	1	6	0	172	8	0	6
9	190	9	5	0	192	6	2	3	194	3	0	6
10	211	11	9	7	213	10	10	6	215	10	0	7
11	233	2	2	2	235	3	6	9	237	5	0	8
12	254	4	6	9	256	8	3	0	259	0	0	9
13	275	6	11	3	278	0	11	3	280	7	0	9
14	296	9	3	10	299	5	7	6	302	2	0	10
15	317	11	8	5	320	10	3	9	323	9	0	11
16	339	2	1	0	342	3	0	0	345	4	1	0
17	360	4	5	6	363	7	8	3	366	11	1	0
18	381	6	10	1	385	0	4	6	388	6	1	1
19	402	9	2	8	406	5	0	9	410	1	1	2
20	423	11	7	3	427	9	9	0	431	8	1	3
21	445	1	11	9	449	2	5	3	453	3	1	3
22	466	4	4	4	470	7	1	6	474	10	1	4
23	487	6	8	11	491	11	9	9	496	5	1	5
24	508	9	1	6	513	4	6	0	518	0	1	6
25	529	11	6	0	534	9	2	3	539	7	1	6
26	551	1	10	7	556	1	10	6	561	2	1	7
27	572	4	3	2	577	6	6	9	582	9	1	8
28	593	6	7	9	598	11	3	0	604	4	1	9
29	614	9	0	3	620	3	11	3	625	11	1	9
30	635	11	4	10	641	8	7	6	647	6	1	10
31	656	1	9	5	663	1	3	9	669	1	1	11
32	678	4	2	0	684	6	0	0	690	8	2	0
33	699	6	6	6	705	10	8	3	712	3	2	0
34	720	8	11	1	727	3	4	6	733	10	2	1
35	741	11	3	8	748	8	0	9	755	5	2	2
36	763	1	8	3	770	0	9	0	777	0	2	3
37	784	4	0	9	791	5	5	3	798	7	2	3
38	805	6	5	4	812	10	1	6	820	2	2	4
39	826	8	9	11	834	2	9	9	841	9	2	5
40	847	11	2	6	855	7	6	0	863	4	2	6
80	1695	10	5	0	1711	3	0	0	1726	8	5	0

Feet Long.	Side 56 In.				Side 56½ In.				Side 56¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	5	5	4	0	5	5	11	0	5	6	6	0
½	10	10	8	0	10	11	10	0	11	1	0	1
¾	16	4	0	0	16	5	9	0	16	7	6	2
1	21	9	4	0	21	11	8	0	22	2	0	3
2	43	6	8	0	43	11	6	1	44	4	0	6
3	65	4	0	0	65	11	0	2	66	6	0	9
4	87	1	4	0	87	10	8	3	88	8	1	0
5	108	10	8	0	109	10	4	3	110	10	1	3
6	130	8	0	0	131	10	0	4	133	0	1	6
7	152	5	4	0	153	9	8	5	155	2	1	9
8	174	2	8	0	175	9	4	6	177	4	2	0
9	196	0	0	0	197	9	0	6	199	6	2	3
10	217	9	4	0	219	8	8	7	221	8	2	6
11	239	6	8	0	241	8	4	8	243	10	2	9
12	261	4	0	0	263	8	0	9	266	0	3	0
13	283	1	4	0	285	7	8	9	288	2	3	3
14	304	10	8	0	307	7	4	10	310	4	3	6
15	326	8	0	0	329	7	0	11	332	6	3	9
16	348	5	4	0	351	6	9	0	354	8	4	0
17	370	2	8	0	373	6	5	0	376	10	4	3
18	392	0	0	0	395	6	1	1	399	0	4	6
19	413	9	4	0	417	5	9	2	421	2	4	9
20	435	6	8	0	439	5	5	3	443	4	5	0
21	457	4	0	0	461	5	1	3	465	6	5	3
22	479	1	4	0	483	4	9	4	487	8	5	6
23	500	10	8	0	505	4	5	5	509	10	5	9
24	522	8	0	0	527	4	1	6	532	0	6	0
25	544	5	4	0	549	3	9	6	554	2	6	3
26	566	2	8	0	571	3	5	7	576	4	6	6
27	588	0	0	0	593	3	1	8	598	6	6	9
28	609	9	4	0	615	2	9	9	620	8	7	0
29	631	6	8	0	637	2	5	9	642	10	7	3
30	653	4	0	0	659	2	1	10	665	0	7	6
31	675	1	4	0	681	1	9	11	687	2	7	9
32	696	10	8	0	703	1	6	0	709	4	8	0
33	718	8	0	0	725	1	2	0	731	6	8	3
34	740	5	4	0	747	0	10	1	753	8	8	6
35	762	2	8	0	769	0	6	2	775	10	8	9
36	784	0	0	0	791	0	2	3	798	0	9	0
37	805	9	4	0	812	11	10	3	820	2	9	3
38	827	6	8	0	834	11	6	4	842	4	9	6
39	849	4	0	0	856	11	2	5	864	6	9	9
40	871	1	4	0	878	10	10	6	886	8	10	0
80	1742	2	8	0	1757	9	9	0	1773	5	8	0

Feet Long.	Side 56¾ In.				Side 57 In.				Side 57¼ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	5	7	1	1	5	7	8	3	5	8	3	4
½	11	2	2	3	11	3	4	6	11	4	6	9
¾	16	9	3	5	16	11	0	9	17	0	10	2
1	22	4	4	6	22	6	9	0	22	9	1	6
2	44	8	9	1	45	1	6	0	45	6	3	1
3	67	1	1	8	67	8	3	0	68	3	4	8
4	89	5	6	3	90	3	0	0	91	0	6	3
5	111	9	10	9	112	9	9	0	113	9	7	9
6	134	2	3	4	135	4	6	0	136	6	9	4
7	156	6	7	11	157	11	3	0	159	3	10	11
8	178	11	0	6	180	6	0	0	182	1	0	6
9	201	3	5	0	203	0	9	0	204	10	2	0
10	223	7	9	7	225	7	6	0	227	7	3	7
11	246	0	2	2	248	2	3	0	250	4	5	2
12	268	4	6	9	270	9	0	0	273	1	6	9
13	290	8	11	3	293	3	9	0	295	10	8	3
14	313	1	3	10	315	10	6	0	318	7	9	10
15	335	5	8	5	338	5	3	0	341	4	11	5
16	357	10	1	0	361	0	0	0	364	2	1	0
17	380	2	5	6	383	6	9	0	386	11	2	6
18	402	6	10	1	406	1	6	0	409	8	4	1
19	424	11	2	8	428	8	3	0	432	5	5	8
20	447	3	7	3	451	3	0	0	455	2	7	3
21	469	7	11	9	473	9	9	0	477	11	8	9
22	492	0	4	4	496	4	6	0	500	8	10	4
23	514	4	8	11	518	11	3	0	523	5	11	11
24	536	9	1	6	541	6	0	0	546	3	1	6
25	559	1	6	0	564	0	9	0	569	0	3	0
26	581	5	10	7	586	7	6	0	591	9	4	7
27	603	10	3	2	609	2	3	0	614	6	6	2
28	626	2	7	9	631	9	0	0	637	3	7	9
29	648	7	0	3	654	3	9	0	660	0	9	3
30	670	11	4	10	676	10	6	0	682	9	10	10
31	693	3	9	5	699	5	3	0	705	7	0	5
32	715	8	2	0	722	0	0	0	728	4	2	0
33	738	0	6	6	744	6	9	0	751	1	3	6
34	760	4	11	1	767	1	6	0	773	10	5	1
35	782	9	3	8	789	8	3	0	796	7	6	8
36	805	1	8	3	812	3	0	0	819	4	8	3
37	827	6	0	9	834	9	9	0	842	1	9	9
38	849	10	5	4	857	4	6	0	864	10	11	4
39	872	2	9	11	879	11	3	0	887	8	0	11
40	894	7	2	6	902	6	0	0	910	5	2	6
80	1789	2	5	0	1805	0	0	0	1820	10	5	0

Feet Long.	Side 57¼ In.				Side 57⅝ In.				Side 58 In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	5	8	10	6	5	9	5	9	5	10	1	0
½	11	5	9	1	11	6	11	6	11	8	2	0
¾	17	2	7	8	17	4	5	3	17	6	3	0
1	22	11	6	3	23	1	11	0	23	4	4	0
2	45	11	0	6	46	3	10	1	46	8	8	0
3	68	10	6	9	69	5	9	2	70	1	0	0
4	91	10	1	0	92	7	8	3	93	5	4	0
5	114	9	7	3	115	9	7	3	116	9	8	0
6	137	9	1	6	138	11	6	4	140	2	0	0
7	160	8	7	9	162	1	5	5	163	6	4	0
8	183	8	2	0	185	3	4	6	186	10	8	0
9	206	7	8	3	208	5	3	6	210	3	0	0
10	229	7	2	6	231	7	2	7	233	7	4	0
11	252	6	8	9	254	9	1	8	256	11	8	0
12	275	6	3	0	277	11	0	9	280	4	0	0
13	298	5	9	3	301	0	11	9	303	8	4	0
14	321	5	3	6	324	2	10	10	327	0	8	0
15	344	4	9	9	347	4	9	11	350	5	0	0
16	367	4	4	0	370	6	9	0	373	9	4	0
17	390	3	10	3	393	8	8	0	397	1	8	0
18	413	3	4	6	416	10	7	1	420	6	0	0
19	436	2	10	9	440	0	6	2	443	10	4	0
20	459	2	5	0	463	2	5	3	467	2	8	0
21	482	1	11	3	486	4	4	3	490	7	0	0
22	505	1	5	6	509	6	3	4	513	11	4	0
23	528	0	11	9	532	8	2	5	537	3	8	0
24	551	0	6	0	555	10	1	6	560	8	0	0
25	574	0	0	3	579	0	0	6	584	0	4	0
26	596	11	6	6	602	1	11	7	607	4	8	0
27	619	11	0	9	625	3	10	8	630	9	0	0
28	642	10	7	0	648	5	9	9	654	1	4	0
29	665	10	1	3	671	7	8	9	677	5	8	0
30	688	9	7	6	694	9	7	10	700	10	0	0
31	711	9	1	9	717	11	6	11	724	2	4	0
32	734	8	8	0	741	1	6	0	747	6	8	0
33	757	8	2	3	764	3	5	0	770	11	0	0
34	780	7	8	6	787	5	4	1	794	3	4	0
35	803	7	2	9	810	7	3	2	817	7	8	0
36	826	6	9	0	833	9	2	3	841	0	0	0
37	849	6	3	3	856	11	1	3	864	4	4	0
38	872	5	9	6	880	1	0	4	887	8	8	0
39	895	5	3	9	903	2	11	5	911	1	0	0
40	918	4	10	0	926	4	10	6	934	5	4	0
80	1836	9	8	0	1852	9	9	0	1868	10	8	0

Feet Long.	Side 58¼ In.				Side 58⅜ In.				Side 58¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	5	10	8	3	5	11	3	6	5	11	10	10
½	11	9	4	6	11	10	7	1	11	11	9	9
¾	17	8	0	9	17	9	10	8	17	11	8	8
1	23	6	9	0	23	9	2	3	23	11	7	6
2	47	1	6	1	47	6	4	6	47	11	3	1
3	70	8	3	2	71	3	6	9	71	10	10	8
4	94	3	0	3	95	0	9	0	95	10	6	3
5	117	9	9	3	118	9	11	3	119	10	1	9
6	141	4	6	4	142	7	1	6	143	9	9	4
7	164	11	3	5	166	4	3	9	167	9	4	11
8	188	6	0	6	190	1	6	0	191	9	0	6
9	212	0	9	6	213	10	8	3	215	8	8	0
10	235	7	6	7	237	7	10	6	239	8	3	7
11	259	2	3	8	261	5	0	9	263	7	11	2
12	282	9	0	9	285	2	3	0	287	7	6	9
13	306	3	9	9	308	11	5	3	311	7	2	3
14	329	10	6	10	332	8	7	6	335	6	9	10
15	353	5	3	11	356	5	9	9	359	6	5	5
16	377	0	1	0	380	3	0	0	383	6	1	0
17	400	6	10	0	404	0	2	3	407	5	8	6
18	424	1	7	1	427	9	4	6	431	5	4	1
19	447	8	4	2	451	6	6	9	455	4	11	8
20	471	3	1	3	475	3	9	0	479	4	7	3
21	494	9	10	3	499	0	11	3	503	4	2	9
22	518	4	7	4	522	10	1	6	527	3	10	4
23	541	11	4	5	546	7	3	9	551	3	5	11
24	565	6	1	6	570	4	6	0	575	3	1	6
25	589	0	10	6	594	1	8	3	599	2	9	0
26	612	7	7	7	617	10	10	6	623	2	4	7
27	636	2	4	8	641	8	0	9	647	2	0	2
28	659	9	1	9	665	5	3	0	671	1	7	9
29	683	3	10	9	689	2	5	3	695	1	3	3
30	706	10	7	10	712	11	7	6	719	0	10	10
31	730	5	4	11	736	8	9	9	743	0	6	5
32	754	0	2	0	760	6	0	0	767	0	2	0
33	777	6	11	0	784	3	2	3	790	11	9	6
34	801	1	8	1	808	0	4	6	814	11	5	1
35	824	8	5	2	831	9	6	9	838	11	0	8
36	848	3	2	3	855	6	9	0	862	10	8	3
37	871	9	11	3	879	3	11	3	886	10	3	9
38	895	4	8	4	903	1	1	6	910	9	11	4
39	918	11	5	5	926	10	3	9	934	9	6	11
40	942	6	2	6	950	7	6	0	958	9	2	6
80	1885	0	5	0	1901	3	0	0	1917	6	5	0

Feet Long.	Side 59 In.				Side 59½ In.				Side 59¾ In.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.
¼	6	0	6	3	6	1	1	7	6	1	9	0
½	12	1	0	6	12	2	3	3	12	3	6	1
¾	18	1	6	9	18	3	4	11	18	5	3	2
1	24	2	1	0	24	4	6	6	24	7	0	3
2	48	4	2	0	48	9	1	1	49	2	0	6
3	72	6	3	0	73	1	7	8	73	9	0	9
4	96	8	4	0	97	6	2	3	98	4	1	0
5	120	10	5	0	121	10	8	9	122	11	1	3
6	145	0	6	0	146	3	3	4	147	6	1	6
7	169	2	7	0	170	7	9	11	172	1	1	9
8	193	4	8	0	195	0	4	6	196	8	2	0
9	217	6	9	0	219	4	11	0	221	3	2	3
10	241	8	10	0	243	9	5	7	245	10	2	6
11	265	10	11	0	268	2	0	2	270	5	2	9
12	290	1	0	0	292	6	6	9	295	0	3	0
13	314	3	1	0	316	11	1	3	319	7	3	3
14	338	5	2	0	341	3	7	10	344	2	3	6
15	362	7	3	0	365	8	2	5	368	9	3	9
16	386	9	4	0	390	0	9	0	393	4	4	0
17	410	11	5	0	414	5	3	6	417	11	4	3
18	435	1	6	0	438	9	10	1	442	6	4	6
19	459	3	7	0	463	2	4	8	467	1	4	9
20	483	5	8	0	487	6	11	3	491	8	5	0
21	507	7	9	0	511	11	5	9	516	3	5	3
22	531	9	10	0	536	4	0	4	540	10	5	6
23	555	11	11	0	560	8	6	11	565	5	5	9
24	580	2	0	0	585	1	1	6	590	0	6	0
25	604	4	1	0	609	5	8	0	614	7	6	3
26	628	6	2	0	633	10	2	7	639	2	6	6
27	652	8	3	0	658	2	9	2	663	9	6	9
28	676	10	4	0	682	7	3	9	688	4	7	0
29	701	0	5	0	706	11	10	3	712	11	7	3
30	725	2	6	0	731	4	4	10	737	6	7	6
31	749	4	7	0	755	8	11	5	762	1	7	9
32	773	6	8	0	780	1	6	0	786	8	8	0
33	797	8	9	0	804	6	0	6	811	3	8	3
34	821	10	10	0	828	10	7	1	835	10	8	6
35	846	0	11	0	853	3	1	8	860	5	8	9
36	870	3	0	0	877	7	8	3	885	0	9	0
37	894	5	1	0	902	0	2	9	909	7	9	3
38	918	7	2	0	926	4	9	4	934	2	9	6
39	942	9	3	0	950	9	3	11	958	9	9	9
40	966	11	4	0	975	1	10	6	983	4	10	0
80	1933	10	8	0	1950	3	9	0	1966	9	8	0

Feet Long.	Side 59¾ In.				Side 60 In.				Side 6 Feet.			
	Ft.	In.	Pts.	2ds.	Ft.	In.	Pts.	2ds.	Yds.	Ft.	In.	Pts.
¼	6	2	4	6	6	3	0	0	0	9	0	0
½	12	4	9	0	12	6	0	0	0	18	0	0
¾	18	7	1	6	18	9	0	0	1	0	0	0
1	24	9	6	0	25	0	0	0	1	9	0	0
2	49	7	0	1	50	0	0	0	2	18	0	0
3	74	4	6	2	75	0	0	0	4	0	0	0
4	99	2	0	3	100	0	0	0	5	9	0	0
5	123	11	6	3	125	0	0	0	6	18	0	0
6	148	9	0	4	150	0	0	0	8	0	0	0
7	173	6	6	5	175	0	0	0	9	9	0	0
8	198	4	0	6	200	0	0	0	10	18	0	0
9	223	1	6	6	225	0	0	0	12	0	0	0
10	247	11	0	7	250	0	0	0	13	9	0	0
11	272	8	6	8	275	0	0	0	14	18	0	0
12	297	6	0	9	300	0	0	0	16	0	0	0
13	322	3	6	9	325	0	0	0	17	9	0	0
14	347	1	0	10	350	0	0	0	18	18	0	0
15	371	10	6	11	375	0	0	0	20	0	0	0
16	396	8	1	0	400	0	0	0	21	9	0	0
17	421	5	7	0	425	0	0	0	22	18	0	0
18	446	3	1	1	450	0	0	0	24	0	0	0
19	471	0	7	2	475	0	0	0	25	9	0	0
20	495	10	1	3	500	0	0	0	26	18	0	0
21	520	7	7	3	525	0	0	0	28	0	0	0
22	545	5	1	4	550	0	0	0	29	9	0	0
23	570	2	7	5	575	0	0	0	30	18	0	0
24	595	0	1	6	600	0	0	0	32	0	0	0
25	619	9	7	6	625	0	0	0	33	9	0	0
26	644	7	1	7	650	0	0	0	34	18	0	0
27	669	4	7	8	675	0	0	0	36	0	0	0
28	694	2	1	9	700	0	0	0	37	9	0	0
29	718	11	7	9	725	0	0	0	38	18	0	0
30	743	9	1	10	750	0	0	0	40	0	0	0
31	768	6	7	11	775	0	0	0	41	9	0	0
32	793	4	2	0	800	0	0	0	42	18	0	0
33	818	1	8	0	825	0	0	0	44	0	0	0
34	842	11	2	1	850	0	0	0	45	9	0	0
35	867	8	8	2	875	0	0	0	46	18	0	0
36	892	6	2	3	900	0	0	0	48	0	0	0
37	917	3	8	3	925	0	0	0	49	9	0	0
38	942	1	2	4	950	0	0	0	50	18	0	0
39	966	10	8	5	975	0	0	0	52	0	0	0
40	991	8	2	6	1000	0	0	0	53	9	0	0
80	1983	4	5	0	2000	0	0	0	106	18	0	0

Feet Long.	Side 7 Feet.				Side 8 Feet.				Side 9 Feet.			
	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.
¼	0	12	3	0	0	16	0	0	0	20	3	0
½	0	24	6	0	1	5	0	0	1	13	6	0
¾	1	9	9	0	1	21	0	0	2	6	9	0
1	1	22	0	0	2	10	0	0	3	0	0	0
2	3	17	0	0	4	20	0	0	6	0	0	0
3	5	12	0	0	7	3	0	0	9	0	0	0
4	7	7	0	0	9	13	0	0	12	0	0	0
5	9	2	0	0	11	23	0	0	15	0	0	0
6	10	24	0	0	14	6	0	0	18	0	0	0
7	12	19	0	0	16	16	0	0	21	0	0	0
8	14	14	0	0	18	26	0	0	24	0	0	0
9	16	9	0	0	21	9	0	0	27	0	0	0
10	18	4	0	0	23	19	0	0	30	0	0	0
11	19	26	0	0	26	2	0	0	33	0	0	0
12	21	21	0	0	28	12	0	0	36	0	0	0
13	23	16	0	0	30	22	0	0	39	0	0	0
14	25	11	0	0	33	5	0	0	42	0	0	0
15	27	6	0	0	35	15	0	0	45	0	0	0
16	29	1	0	0	37	25	0	0	48	0	0	0
17	30	23	0	0	40	8	0	0	51	0	0	0
18	32	18	0	0	42	18	0	0	54	0	0	0
19	34	13	0	0	45	1	0	0	57	0	0	0
20	36	8	0	0	47	11	0	0	60	0	0	0
21	38	3	0	0	49	21	0	0	63	0	0	0
22	39	25	0	0	52	4	0	0	66	0	0	0
23	41	20	0	0	54	14	0	0	69	0	0	0
24	43	15	0	0	56	24	0	0	72	0	0	0
25	45	10	0	0	59	7	0	0	75	0	0	0
26	47	5	0	0	61	17	0	0	78	0	0	0
27	49	0	0	0	64	0	0	0	81	0	0	0
28	50	22	0	0	66	10	0	0	84	0	0	0
29	52	17	0	0	68	20	0	0	87	0	0	0
30	54	12	0	0	71	3	0	0	90	0	0	0
31	56	7	0	0	73	13	0	0	93	0	0	0
32	58	2	0	0	75	23	0	0	96	0	0	0
33	59	24	0	0	78	6	0	0	99	0	0	0
34	61	19	0	0	80	16	0	0	102	0	0	0
35	63	14	0	0	82	26	0	0	105	0	0	0
36	65	9	0	0	85	9	0	0	108	0	0	0
37	67	4	0	0	87	19	0	0	111	0	0	0
38	68	26	0	0	90	2	0	0	114	0	0	0
39	70	21	0	0	92	12	0	0	117	0	0	0
40	72	16	0	0	94	22	0	0	120	0	0	0
80	145	5	0	0	189	17	0	0	240	0	0	0

Feet Long.	Side 10 Feet.				Side 11 Feet.				Side 12 Feet.			
	Yds.	Ft.	In.	Pts	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.
¼	0	25	0	0	1	3	3	0	1	9	0	0
½	1	23	0	0	2	6	6	0	2	18	0	0
¾	2	21	0	0	3	9	9	0	4	0	0	0
1	3	19	0	0	4	13	0	0	5	9	0	0
2	7	11	0	0	8	26	0	0	10	18	0	0
3	11	3	0	0	13	12	0	0	16	0	0	0
4	14	22	0	0	17	25	0	0	21	9	0	0
5	18	14	0	0	22	11	0	0	26	18	0	0
6	22	6	0	0	26	24	0	0	32	0	0	0
7	25	25	0	0	31	10	0	0	37	9	0	0
8	29	17	0	0	35	23	0	0	42	18	0	0
9	33	9	0	0	40	9	0	0	48	0	0	0
10	37	1	0	0	44	22	0	0	53	9	0	0
11	40	20	0	0	49	8	0	0	58	18	0	0
12	44	12	0	0	53	21	0	0	64	0	0	0
13	48	4	0	0	58	7	0	0	69	9	0	0
14	51	23	0	0	62	20	0	0	74	18	0	0
15	55	15	0	0	67	6	0	0	80	0	0	0
16	59	7	0	0	71	19	0	0	85	9	0	0
17	62	26	0	0	76	5	0	0	90	18	0	0
18	66	18	0	0	80	18	0	0	96	0	0	0
19	70	10	0	0	85	4	0	0	101	9	0	0
20	74	2	0	0	89	17	0	0	106	18	0	0
21	77	21	0	0	94	3	0	0	112	0	0	0
22	81	13	0	0	98	16	0	0	117	9	0	0
23	85	5	0	0	103	2	0	0	122	18	0	0
24	88	24	0	0	107	15	0	0	128	0	0	0
25	92	16	0	0	112	1	0	0	133	9	0	0
26	96	8	0	0	116	14	0	0	138	18	0	0
27	100	0	0	0	121	0	0	0	144	0	0	0
28	103	19	0	0	125	13	0	0	149	9	0	0
29	107	11	0	0	129	26	0	0	154	18	0	0
30	111	3	0	0	134	12	0	0	160	0	0	0
31	114	22	0	0	138	25	0	0	165	9	0	0
32	118	14	0	0	143	11	0	0	170	18	0	0
33	122	6	0	0	147	24	0	0	176	0	0	0
34	125	25	0	0	152	10	0	0	181	9	0	0
35	129	17	0	0	156	23	0	0	186	18	0	0
36	133	9	0	0	161	9	0	0	192	0	0	0
37	137	1	0	0	165	22	0	0	197	9	0	0
38	140	20	0	0	170	8	0	0	202	18	0	0
39	144	12	0	0	174	21	0	0	208	0	0	0
40	148	4	0	0	179	7	0	0	213	9	0	0
80	296	8	0	0	358	14	0	0	426	18	0	0

Feet Long.	Side 13 Feet.				Side 14 Feet.				Side 15 Feet.			
	Yds	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.
¼	1	15	3	0	1	22	0	0	2	2	3	0
½	3	3	6	0	3	17	0	0	4	4	6	0
¾	4	18	9	0	5	12	0	0	6	6	9	0
1	6	7	0	0	7	7	0	0	8	9	0	0
2	12	14	0	0	14	14	0	0	16	18	0	0
3	18	21	0	0	21	21	0	0	25	0	0	0
4	25	1	0	0	29	1	0	0	33	9	0	0
5	31	8	0	0	36	8	0	0	41	18	0	0
6	37	15	0	0	43	15	0	0	50	0	0	0
7	43	22	0	0	50	22	0	0	58	9	0	0
8	50	2	0	0	58	2	0	0	66	18	0	0
9	56	9	0	0	65	9	0	0	75	0	0	0
10	62	16	0	0	72	16	0	0	83	9	0	0
11	68	23	0	0	79	23	0	0	91	18	0	0
12	75	3	0	0	87	3	0	0	100	0	0	0
13	81	10	0	0	94	10	0	0	108	9	0	0
14	87	17	0	0	101	17	0	0	116	18	0	0
15	93	24	0	0	108	24	0	0	125	0	0	0
16	100	4	0	0	116	4	0	0	133	9	0	0
17	106	11	0	0	123	11	0	0	141	18	0	0
18	112	18	0	0	130	18	0	0	150	0	0	0
19	118	25	0	0	137	25	0	0	158	9	0	0
20	125	5	0	0	145	5	0	0	166	18	0	0
21	131	12	0	0	152	12	0	0	175	0	0	0
22	137	19	0	0	159	19	0	0	183	9	0	0
23	143	26	0	0	166	26	0	0	191	18	0	0
24	150	6	0	0	174	6	0	0	200	0	0	0
25	156	13	0	0	181	13	0	0	208	9	0	0
26	162	20	0	0	188	20	0	0	216	18	0	0
27	169	0	0	0	196	0	0	0	225	0	0	0
28	175	7	0	0	203	7	0	0	233	9	0	0
29	181	14	0	0	210	14	0	0	241	18	0	0
30	187	21	0	0	217	21	0	0	250	0	0	0
31	194	1	0	0	225	1	0	0	258	9	0	0
32	200	8	0	0	232	8	0	0	266	18	0	0
33	206	15	0	0	239	15	0	0	275	0	0	0
34	212	22	0	0	246	22	0	0	283	9	0	0
35	219	2	0	0	254	2	0	0	291	18	0	0
36	225	9	0	0	261	9	0	0	300	0	0	0
37	231	16	0	0	268	16	0	0	308	9	0	0
38	237	23	0	0	275	23	0	0	316	18	0	0
39	244	3	0	0	283	3	0	0	325	0	0	0
40	250	10	0	0	290	10	0	0	333	9	0	0
80	500	20	0	0	580	20	0	0	666	18	0	0

Feet Long.	Side 16 Feet.				Side 17 Feet.				Side 18 Feet.			
	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.
½	2	10	0	0	2	18	3	0	3	0	0	0
¼	4	20	0	0	5	9	6	0	6	0	0	0
¾	7	3	0	0	8	0	9	0	9	0	0	0
1	9	13	0	0	10	19	0	0	12	0	0	0
2	18	26	0	0	21	11	0	0	24	0	0	0
3	28	12	0	0	32	3	0	0	36	0	0	0
4	37	25	0	0	42	22	0	0	48	0	0	0
5	47	11	0	0	53	14	0	0	60	0	0	0
6	56	24	0	0	64	6	0	0	72	0	0	0
7	66	10	0	0	74	25	0	0	84	0	0	0
8	75	23	0	0	85	17	0	0	96	0	0	0
9	85	9	0	0	96	9	0	0	108	0	0	0
10	94	22	0	0	107	1	0	0	120	0	0	0
11	104	8	0	0	117	20	0	0	132	0	0	0
12	113	21	0	0	128	12	0	0	144	0	0	0
13	123	7	0	0	139	4	0	0	156	0	0	0
14	132	20	0	0	149	23	0	0	168	0	0	0
15	142	6	0	0	160	15	0	0	180	0	0	0
16	151	19	0	0	171	7	0	0	192	0	0	0
17	161	5	0	0	181	26	0	0	204	0	0	0
18	170	18	0	0	192	18	0	0	216	0	0	0
19	180	4	0	0	203	10	0	0	228	0	0	0
20	189	17	0	0	214	2	0	0	240	0	0	0
21	199	3	0	0	224	21	0	0	252	0	0	0
22	208	16	0	0	235	13	0	0	264	0	0	0
23	218	2	0	0	246	5	0	0	276	0	0	0
24	227	15	0	0	256	24	0	0	288	0	0	0
25	237	1	0	0	267	16	0	0	300	0	0	0
26	246	14	0	0	278	8	0	0	312	0	0	0
27	256	0	0	0	289	0	0	0	324	0	0	0
28	265	13	0	0	299	10	0	0	336	0	0	0
29	274	26	0	0	310	11	0	0	348	0	0	0
30	284	12	0	0	321	3	0	0	360	0	0	0
31	293	25	0	0	331	22	0	0	372	0	0	0
32	303	11	0	0	342	14	0	0	384	0	0	0
33	312	24	0	0	353	6	0	0	396	0	0	0
34	322	10	0	0	363	25	0	0	408	0	0	0
35	331	23	0	0	374	17	0	0	420	0	0	0
36	341	9	0	0	385	9	0	0	432	0	0	0
37	350	22	0	0	396	1	0	0	444	0	0	0
38	360	8	0	0	406	20	0	0	456	0	0	0
39	369	21	0	0	417	12	0	0	468	0	0	0
40	379	7	0	0	428	4	0	0	480	0	0	0
80	758	14	0	0	856	8	0	0	960	0	0	0

Feet Long.	Side 19 Feet.				Side 20 Feet.				Side 21 Feet.			
	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.
¼	3	9	3	0	3	19	0	0	4	2	3	0
½	6	18	6	0	7	11	0	0	8	4	6	0
¾	10	0	9	0	11	3	0	0	12	6	9	0
1	13	10	0	0	14	22	0	0	16	9	0	0
2	26	20	0	0	29	17	0	0	32	18	0	0
3	40	3	0	0	44	12	0	0	49	0	0	0
4	53	13	0	0	59	7	0	0	65	9	0	0
5	66	23	0	0	74	2	0	0	81	18	0	0
6	80	6	0	0	88	24	0	0	98	0	0	0
7	93	16	0	0	103	19	0	0	114	9	0	0
8	106	26	0	0	118	14	0	0	130	18	0	0
9	120	9	0	0	133	9	0	0	147	0	0	0
10	133	19	0	0	148	4	0	0	163	9	0	0
11	147	2	0	0	162	26	0	0	179	8	0	0
12	160	12	0	0	177	21	0	0	196	0	0	0
13	173	22	0	0	192	16	0	0	212	9	0	0
14	187	5	0	0	207	11	0	0	228	18	0	0
15	200	15	0	0	222	6	0	0	245	0	0	0
16	213	25	0	0	237	1	0	0	261	9	0	0
17	227	8	0	0	251	23	0	0	277	18	0	0
18	240	18	0	0	266	18	0	0	294	0	0	0
19	254	1	0	0	281	13	0	0	310	9	0	0
20	267	11	0	0	296	8	0	0	326	18	0	0
21	280	21	0	0	311	3	0	0	343	0	0	0
22	294	4	0	0	325	25	0	0	359	9	0	0
23	307	14	0	0	340	20	0	0	375	18	0	0
24	320	24	0	0	355	15	0	0	392	0	0	0
25	334	7	0	0	370	10	0	0	408	9	0	0
26	347	17	0	0	385	5	0	0	424	18	0	0
27	361	0	0	0	400	0	0	0	441	0	0	0
28	374	10	0	0	414	22	0	0	457	9	0	0
29	387	20	0	0	429	17	0	0	473	18	0	0
30	401	3	0	0	444	12	0	0	490	0	0	0
31	414	13	0	0	459	7	0	0	506	9	0	0
32	427	23	0	0	474	2	0	0	522	18	0	0
33	441	6	0	0	488	24	0	0	539	0	0	0
34	454	16	0	0	503	19	0	0	555	9	0	0
35	467	26	0	0	518	14	0	0	571	18	0	0
36	481	9	0	0	533	9	0	0	588	0	0	0
37	494	19	0	0	548	4	0	0	604	9	0	0
38	508	2	0	0	562	26	0	0	620	18	0	0
39	521	12	0	0	577	21	0	0	637	0	0	0
40	534	22	0	0	592	16	0	0	653	9	0	0
80	1069	17	0	0	1185	5	0	0	1306	18	0	0

Feet Long.	Side 22 Feet.				Side 23 Feet.				Side 24 Feet.			
	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.
¼	4	13	0	0	4	24	3	0	5	9	0	0
½	8	26	0	0	9	21	6	0	10	18	0	0
¾	13	12	0	0	14	18	9	0	16	0	0	0
1	17	25	0	0	19	16	0	0	21	9	0	0
2	35	23	0	0	39	5	0	0	42	18	0	0
3	53	21	0	0	58	21	0	0	64	0	0	0
4	71	19	0	0	78	10	0	0	85	9	0	0
5	89	17	0	0	97	26	0	0	106	18	0	0
6	107	15	0	0	117	15	0	0	128	0	0	0
7	125	13	0	0	137	4	0	0	149	9	0	0
8	143	11	0	0	156	20	0	0	170	18	0	0
9	161	9	0	0	176	9	0	0	192	0	0	0
10	179	7	0	0	195	25	0	0	213	9	0	0
11	197	5	0	0	215	14	0	0	234	18	0	0
12	215	3	0	0	235	3	0	0	256	0	0	0
13	233	1	0	0	254	19	0	0	277	9	0	0
14	250	26	0	0	274	8	0	0	298	18	0	0
15	268	24	0	0	293	24	0	0	320	0	0	0
16	286	22	0	0	313	13	0	0	341	9	0	0
17	304	20	0	0	333	2	0	0	362	18	0	0
18	322	18	0	0	352	18	0	0	384	0	0	0
19	340	16	0	0	372	7	0	0	405	9	0	0
20	358	14	0	0	391	23	0	0	426	18	0	0
21	376	12	0	0	411	12	0	0	448	0	0	0
22	394	10	0	0	431	1	0	0	469	9	0	0
23	412	8	0	0	450	17	0	0	490	18	0	0
24	430	6	0	0	470	6	0	0	512	0	0	0
25	448	4	0	0	489	22	0	0	533	9	0	0
26	466	2	0	0	509	11	0	0	554	18	0	0
27	484	0	0	0	529	0	0	0	576	0	0	0
28	501	25	0	0	548	16	0	0	597	9	0	0
29	519	23	0	0	568	5	0	0	618	18	0	0
30	537	21	0	0	587	21	0	0	640	0	0	0
31	555	19	0	0	607	10	0	0	661	9	0	0
32	573	17	0	0	626	26	0	0	682	18	0	0
33	591	15	0	0	646	15	0	0	704	0	0	0
34	609	13	0	0	666	4	0	0	725	9	0	0
35	627	11	0	0	685	20	0	0	746	18	0	0
36	645	9	0	0	705	9	0	0	768	0	0	0
37	663	7	0	0	724	25	0	0	789	9	0	0
38	681	5	0	0	744	14	0	0	810	18	0	0
39	699	3	0	0	764	3	0	0	832	0	0	0
40	717	1	0	0	783	19	0	0	853	9	0	0
80	1434	2	0	0	1567	11	0	0	1706	18	0	0

Feet Long.	Side 25 Feet.				Side 26 Feet.				Side 27 Feet.			
	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.
¼	5	21	3	0	6	7	0	0	6	20	3	0
½	11	15	6	0	12	14	0	0	13	13	6	0
¾	17	9	9	0	18	21	0	0	20	6	9	0
1	23	4	0	0	25	1	0	0	27	0	0	0
2	46	8	0	0	50	2	0	0	54	0	0	0
3	69	12	0	0	75	3	0	0	81	0	0	0
4	92	16	0	0	100	4	0	0	108	0	0	0
5	115	20	0	0	125	5	0	0	135	0	0	0
6	138	24	0	0	150	6	0	0	162	0	0	0
7	162	1	0	0	175	7	0	0	189	0	0	0
8	185	5	0	0	200	8	0	0	216	0	0	0
9	208	9	0	0	225	9	0	0	243	0	0	0
10	231	13	0	0	250	10	0	0	270	0	0	0
11	254	17	0	0	275	11	0	0	297	0	0	0
12	277	21	0	0	300	12	0	0	324	0	0	0
13	300	25	0	0	325	13	0	0	351	0	0	0
14	324	2	0	0	350	14	0	0	378	0	0	0
15	347	6	0	0	375	15	0	0	405	0	0	0
16	370	10	0	0	400	16	0	0	432	0	0	0
17	393	14	0	0	425	17	0	0	459	0	0	0
18	416	18	0	0	450	18	0	0	486	0	0	0
19	439	22	0	0	475	19	0	0	513	0	0	0
20	462	26	0	0	500	20	0	0	540	0	0	0
21	486	3	0	0	525	21	0	0	567	0	0	0
22	509	7	0	0	550	22	0	0	594	0	0	0
23	532	11	0	0	575	23	0	0	621	0	0	0
24	555	15	0	0	600	24	0	0	648	0	0	0
25	578	19	0	0	625	25	0	0	675	0	0	0
26	601	23	0	0	650	26	0	0	702	0	0	0
27	625	0	0	0	676	0	0	0	729	0	0	0
28	648	4	0	0	701	1	0	0	756	0	0	0
29	671	8	0	0	726	2	0	0	783	0	0	0
30	694	12	0	0	751	3	0	0	810	0	0	0
31	717	16	0	0	776	4	0	0	837	0	0	0
32	740	20	0	0	801	5	0	0	864	0	0	0
33	763	24	0	0	826	6	0	0	891	0	0	0
34	787	1	0	0	851	7	0	0	918	0	0	0
35	810	5	0	0	876	8	0	0	945	0	0	0
36	833	9	0	0	901	9	0	0	972	0	0	0
37	856	13	0	0	926	10	0	0	999	0	0	0
38	879	17	0	0	951	11	0	0	1026	0	0	0
39	903	21	0	0	976	12	0	0	1053	0	0	0
40	925	25	0	0	1001	13	0	0	1080	0	0	0
80	1851	23	0	0	2002	26	0	0	2160	0	0	0

Feet Long.	Side 28 Feet.				Side 29 Feet.				Side 30 Feet.			
	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.	Yds	Ft.	In.	Pts.
¼	7	7	0	0	7	21	3	0	8	9	0	0
½	14	14	0	0	15	15	6	0	16	18	0	0
¾	21	21	0	0	23	9	9	0	25	0	0	0
1	29	1	0	0	31	4	0	0	33	9	0	0
2	58	2	0	0	62	8	0	0	66	18	0	0
3	87	3	0	0	93	12	0	0	100	0	0	0
4	116	4	0	0	124	16	0	0	133	9	0	0
5	145	5	0	0	155	20	0	0	166	18	0	0
6	174	6	0	0	186	24	0	0	200	0	0	0
7	203	7	0	0	218	1	0	0	233	9	0	0
8	232	8	0	0	249	5	0	0	266	18	0	0
9	261	9	0	0	280	9	0	0	300	0	0	0
10	290	10	0	0	311	13	0	0	333	9	0	0
11	319	11	0	0	342	17	0	0	366	18	0	0
12	348	12	0	0	373	21	0	0	400	0	0	0
13	377	13	0	0	404	25	0	0	433	9	0	0
14	406	14	0	0	436	2	0	0	466	18	0	0
15	435	15	0	0	467	6	0	0	500	0	0	0
16	464	16	0	0	498	10	0	0	533	9	0	0
17	493	17	0	0	529	14	0	0	566	18	0	0
18	522	18	0	0	560	18	0	0	600	0	0	0
19	551	19	0	0	591	22	0	0	633	9	0	0
20	580	20	0	0	622	26	0	0	666	18	0	0
21	609	21	0	0	654	3	0	0	700	0	0	0
22	638	22	0	0	685	7	0	0	733	9	0	0
23	667	23	0	0	716	11	0	0	766	18	0	0
24	696	24	0	0	747	15	0	0	800	0	0	0
25	725	25	0	0	778	19	0	0	833	9	0	0
26	754	26	0	0	809	23	0	0	866	18	0	0
27	784	0	0	0	841	0	0	0	900	0	0	0
28	813	1	0	0	872	4	0	0	933	9	0	0
29	842	2	0	0	903	8	0	0	966	18	0	0
30	871	3	0	0	934	12	0	0	1000	0	0	0
31	900	4	0	0	965	16	0	0	1033	9	0	0
32	929	5	0	0	996	20	0	0	1066	18	0	0
33	958	6	0	0	1027	24	0	0	1100	0	0	0
34	987	7	0	0	1059	1	0	0	1133	9	0	0
35	1016	8	0	0	1090	5	0	0	1166	18	0	0
36	1045	9	0	0	1121	9	0	0	1200	0	0	0
37	1074	10	0	0	1152	13	0	0	1233	9	0	0
38	1103	11	0	0	1183	17	0	0	1266	18	0	0
39	1132	12	0	0	1214	21	0	0	1300	0	0	0
40	1161	13	0	0	1245	25	0	0	1333	9	0	0
80	2322	26	0	0	2491	23	0	0	2666	18	0	0

Feet Long.	Side 31 Feet.				Side 32 Feet.				Side 33 Feet.			
	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.
¼	8	24	3	0	9	13	0	0	10	2	3	0
½	17	21	6	0	18	26	0	0	20	4	6	0
¾	26	18	9	0	28	12	0	0	30	6	9	0
1	35	16	0	0	37	25	0	0	40	9	0	0
2	71	5	0	0	75	23	0	0	80	18	0	0
3	106	21	0	0	113	21	0	0	121	0	0	0
4	142	10	0	0	151	19	0	0	161	9	0	0
5	177	26	0	0	189	17	0	0	201	18	0	0
6	213	15	0	0	227	15	0	0	242	0	0	0
7	249	4	0	0	265	13	0	0	282	9	0	0
8	284	20	0	0	303	11	0	0	322	18	0	0
9	320	9	0	0	341	9	0	0	363	0	0	0
10	355	25	0	0	379	7	0	0	403	9	0	0
11	391	14	0	0	417	5	0	0	443	18	0	0
12	427	3	0	0	455	3	0	0	484	0	0	0
13	462	19	0	0	493	1	0	0	524	9	0	0
14	498	8	0	0	530	26	0	0	564	18	0	0
15	533	24	0	0	568	24	0	0	605	0	0	0
16	569	13	0	0	606	22	0	0	645	9	0	0
17	605	2	0	0	644	20	0	0	685	18	0	0
18	640	18	0	0	682	18	0	0	726	0	0	0
19	676	7	0	0	720	16	0	0	766	9	0	0
20	711	23	0	0	758	14	0	0	806	18	0	0
21	747	12	0	0	796	12	0	0	847	0	0	0
22	783	1	0	0	834	10	0	0	887	9	0	0
23	818	17	0	0	872	8	0	0	927	18	0	0
24	854	6	0	0	910	6	0	0	968	0	0	0
25	889	22	0	0	948	4	0	0	1008	9	0	0
26	925	11	0	0	986	2	0	0	1048	18	0	0
27	961	0	0	0	1024	0	0	0	1089	0	0	0
28	996	16	0	0	1061	25	0	0	1129	9	0	0
29	1032	5	0	0	1099	23	0	0	1169	18	0	0
30	1067	21	0	0	1137	21	0	0	1210	0	0	0
31	1103	10	0	0	1175	19	0	0	1250	9	0	0
32	1138	26	0	0	1213	17	0	0	1290	18	0	0
33	1174	15	0	0	1251	15	0	0	1331	0	0	0
34	1210	4	0	0	1289	13	0	0	1371	9	0	0
35	1245	20	0	0	1327	11	0	0	1411	18	0	0
36	1281	9	0	0	1365	9	0	0	1452	0	0	0
37	1316	25	0	0	1403	7	0	0	1492	9	0	0
38	1352	14	0	0	1441	5	0	0	1532	18	0	0
39	1388	3	0	0	1479	3	0	0	1573	0	0	0
40	1423	19	0	0	1517	1	0	0	1613	9	0	0
80	2847	11	0	0	3034	2	0	0	3226	18	0	0

Feet Long.	Side 34 Feet.				Side 35 Feet.				Side 36 Feet.			
	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.	Yds.	Ft.	In.	Pts.
¼	10	19	0	0	11	9	3	0	12	0	0	0
½	21	11	0	0	22	18	6	0	24	0	0	0
¾	32	3	0	0	34	0	9	0	36	0	0	0
1	42	22	0	0	45	10	0	0	48	0	0	0
2	85	17	0	0	90	20	0	0	96	0	0	0
3	128	12	0	0	136	3	0	0	144	0	0	0
4	171	7	0	0	181	13	0	0	192	0	0	0
5	214	2	0	0	226	23	0	0	240	0	0	0
6	256	24	0	0	272	6	0	0	288	0	0	0
7	299	19	0	0	317	16	0	0	336	0	0	0
8	342	14	0	0	362	26	0	0	384	0	0	0
9	385	9	0	0	408	9	0	0	432	0	0	0
10	428	4	0	0	453	19	0	0	480	0	0	0
11	470	26	0	0	499	2	0	0	528	0	0	0
12	513	21	0	0	544	12	0	0	576	0	0	0
13	556	16	0	0	589	22	0	0	624	0	0	0
14	599	11	0	0	635	5	0	0	672	0	0	0
15	642	6	0	0	680	15	0	0	720	0	0	0
16	685	1	0	0	725	25	0	0	768	0	0	0
17	727	23	0	0	771	8	0	0	816	0	0	0
18	770	18	0	0	816	18	0	0	864	0	0	0
19	813	13	0	0	862	1	0	0	912	0	0	0
20	856	8	0	0	907	11	0	0	960	0	0	0
21	899	3	0	0	952	21	0	0	1008	0	0	0
22	941	25	0	0	998	4	0	0	1056	0	0	0
23	984	20	0	0	1043	14	0	0	1104	0	0	0
24	1027	15	0	0	1088	24	0	0	1152	0	0	0
25	1070	10	0	0	1134	7	0	0	1200	0	0	0
26	1113	5	0	0	1179	17	0	0	1248	0	0	0
27	1156	0	0	0	1225	0	0	0	1296	0	0	0
28	1198	22	0	0	1270	10	0	0	1344	0	0	0
29	1241	17	0	0	1315	20	0	0	1392	0	0	0
30	1284	12	0	0	1361	3	0	0	1440	0	0	0
31	1327	7	0	0	1406	13	0	0	1488	0	0	0
32	1370	2	0	0	1451	23	0	0	1536	0	0	0
33	1412	24	0	0	1497	6	0	0	1584	0	0	0
34	1455	19	0	0	1542	16	0	0	1632	0	0	0
35	1498	14	0	0	1587	26	0	0	1680	0	0	0
36	1541	9	0	0	1633	9	0	0	1728	0	0	0
37	1584	4	0	0	1678	19	0	0	1776	0	0	0
38	1626	26	0	0	1724	2	0	0	1824	0	0	0
39	1669	21	0	0	1769	12	0	0	1872	0	0	0
40	1712	16	0	0	1814	22	0	0	1920	0	0	0
80	3425	5	0	0	3629	17	0	0	3840	0	0	0

TABLE IV.

SHOWING THE SQUARE YARDS IN A GIVEN NUMBER OF SQUARE FEET, AND THE SQUARE ROODS IN A GIVEN NUMBER OF SQUARE YARDS.

EXPLANATION OF THE TABLE.

The first division of the following table shows the number of square yards contained in any number of square feet, from 1 foot, to 6543 feet; and the number of square feet contained in any number of square yards, from 1 yard to 727 yards; with the proportionate parts that square feet bear to a square yard, from 1 to 9 feet; and in the second division of the table, are given the number of square roods in any number of square yards, from 36 yards to 5220 yards; also the number of square yards in any number of square roods, from 1 rood to 145 roods, with the proportionate parts that square yards bear to a square rood, from 1 to 36 yards. On the head of the columns, *Sq. Ft.*, stands for square feet; *Sq. Yds.*, for square yards; *Sq. Rds.*, for square roods.

To find the number of square yards in any number of square feet, look in the first column for the feet, opposite which, in the second column, are the square yards equal thereto. To find the square feet in any number of square yards, look in the second column for the given number of yards, and in the first column opposite thereto, are the square feet contained therein. In the second division of the table, you follow the same rule for yards and roods.

EXAMPLES.

1. Required the number of square yards in 540 square feet? Look in the first column for 540, and opposite thereto in the second column, you will find 60, the number of square yards contained therein.

2. How many square yards in 561 square feet? As you will not find this number of feet in the table, look for the next lesser number, which is found in the first column, viz..... 558, opposite which stands 62

look again in the first column near the top of the table, and you will find..... 3, opposite which stands $\frac{1}{3}$

which added to the former makes..... } 561 feet, equal to $62\frac{1}{3}$

square yards.

3. In 540 square yards, how many square feet? Look in the second column for 540, opposite which, in the first or left hand column, you will find 4860, the square feet contained therein.

4. Required the number of square roods in 540 square yards? Look in the first column of the second division of the table for 540, opposite which, in the second column, you will find 15, the number of square roods therein.

5. Required the square yards in 35 square roods? Look in the second column for 35, and in the first column on the same line therewith, stands 1260, the number of square yards equal thereto.

6. Required the square roods in 2457 square yards? As this number of square yards is not to be found in the table, take the next lesser number, viz.

2448, opposite which stands 68

and opposite the remainder, viz.

9, stands $\frac{1}{4}$

2457 $68\frac{1}{4}$

which being added together as above, gives $68\frac{1}{4}$ square roods in 2457 square yards.

Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.
1	$\frac{1}{9}$	342	38	756	84	1170	130
2	$\frac{2}{9}$	351	39	765	85	1179	131
3	$\frac{1}{3}$	360	40	774	86	1188	132
4	$\frac{4}{9}$	369	41	783	87	1197	133
$4\frac{1}{2}$	$\frac{1}{2}$	378	42	792	88	1206	134
5	$\frac{5}{9}$	387	43	801	89	1215	135
6	$\frac{2}{3}$	396	44	810	90	1224	136
7	$\frac{7}{9}$	405	45	819	91	1233	137
8	$\frac{8}{9}$	414	46	828	92	1242	138
9	1	423	47	837	93	1251	139
18	2	432	48	846	94	1260	140
27	3	441	49	855	95	1269	141
36	4	450	50	864	96	1278	142
45	5	459	51	873	97	1287	143
54	6	468	52	882	98	1296	144
63	7	477	53	891	99	1305	145
72	8	486	54	900	100	1314	146
81	9	495	55	909	101	1323	147
90	10	504	56	918	102	1332	148
99	11	513	57	927	103	1341	149
108	12	522	58	936	104	1350	150
117	13	531	59	945	105	1359	151
126	14	540	60	954	106	1368	152
135	15	549	61	963	107	1377	153
144	16	558	62	972	108	1386	154
153	17	567	63	981	109	1395	155
162	18	576	64	990	110	1404	156
171	19	585	65	999	111	1413	157
180	20	594	66	1008	112	1422	158
189	21	603	67	1017	113	1431	159
198	22	612	68	1026	114	1440	160
207	23	621	69	1035	115	1449	161
216	24	630	70	1044	116	1458	162
225	25	639	71	1053	117	1467	163
234	26	648	72	1062	118	1476	164
243	27	657	73	1071	119	1485	165
252	28	666	74	1080	120	1494	166
261	29	675	75	1089	121	1503	167
270	30	684	76	1098	122	1512	168
279	31	693	77	1107	123	1521	169
288	32	702	78	1116	124	1530	170
297	33	711	79	1125	125	1539	171
306	34	720	80	1134	126	1548	172
315	35	729	81	1143	127	1557	173
324	36	738	82	1152	128	1566	174
333	37	747	83	1161	129	1575	175

Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.
1584	176	1998	222	2412	268	2826	314
1593	177	2007	223	2421	269	2835	315
1602	178	2016	224	2430	270	2844	316
1611	179	2025	225	2439	271	2853	317
1620	180	2034	226	2448	272	2862	318
1629	181	2043	227	2457	273	2871	319
1638	182	2052	228	2466	274	2880	320
1647	183	2061	229	2475	275	2889	321
1656	184	2070	230	2484	276	2898	322
1665	185	2079	231	2493	277	2907	323
1674	186	2088	232	2502	278	2916	324
1683	187	2097	233	2511	279	2925	325
1692	188	2106	234	2520	280	2934	326
1701	189	2115	235	2529	281	2943	327
1710	190	2124	236	2538	282	2952	328
1719	191	2133	237	2547	283	2961	329
1728	192	2142	238	2556	284	2970	330
1737	193	2151	239	2565	285	2979	331
1746	194	2160	240	2574	286	2988	332
1755	195	2169	241	2583	287	2997	333
1764	196	2178	242	2592	288	3006	334
1773	197	2187	243	2601	289	3015	335
1782	198	2196	244	2610	290	3024	336
1791	199	2205	245	2619	291	3033	337
1800	200	2214	246	2628	292	3042	338
1809	201	2223	247	2637	293	3051	339
1818	202	2232	248	2646	294	3060	340
1827	203	2241	249	2655	295	3069	341
1836	204	2250	250	2664	296	3078	342
1845	205	2259	251	2673	297	3087	343
1854	206	2268	252	2682	298	3096	344
1863	207	2277	253	2691	299	3105	345
1872	208	2286	254	2700	300	3114	346
1881	209	2295	255	2709	301	3123	347
1890	210	2304	256	2718	302	3132	348
1899	211	2313	257	2727	303	3141	349
1908	212	2322	258	2736	304	3150	350
1917	213	2331	259	2745	305	3159	351
1926	214	2340	260	2754	306	3168	352
1935	215	2349	261	2763	307	3177	353
1944	216	2358	262	2772	308	3186	354
1953	217	2367	263	2781	309	3195	355
1962	218	2376	264	2790	310	3204	356
1971	219	2385	265	2799	311	3213	357
1980	220	2394	266	2808	312	3222	358
1989	221	2403	267	2817	313	3231	359

Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.
3240	360	3654	406	4068	452	4482	498
3249	361	3663	407	4077	453	4491	499
3258	362	3672	408	4086	454	4500	500
3267	363	3681	409	4095	455	4509	501
3276	364	3690	410	4104	456	4518	502
3285	365	3699	411	4113	457	4527	503
3294	366	3708	412	4122	458	4536	504
3303	367	3717	413	4131	459	4545	505
3312	368	3726	414	4140	460	4554	506
3321	369	3735	415	4149	461	4563	507
3330	370	3744	416	4158	462	4572	508
3339	371	3753	417	4167	463	4581	509
3348	372	3762	418	4176	464	4590	510
3357	373	3771	419	4185	465	4599	511
3366	374	3780	420	4194	466	4608	512
3375	375	3789	421	4203	467	4617	513
3384	376	3798	422	4212	468	4626	514
3393	377	3807	423	4221	469	4635	515
3402	378	3816	424	4230	470	4644	516
3411	379	3825	425	4239	471	4653	517
3420	380	3834	426	4248	472	4662	518
3429	381	3843	427	4257	473	4671	519
3438	382	3852	428	4266	474	4680	520
3447	383	3861	429	4275	475	4689	521
3456	384	3870	430	4284	476	4698	522
3465	385	3879	431	4293	477	4707	523
3474	386	3888	432	4302	478	4716	524
3483	387	3897	433	4311	479	4725	525
3492	388	3906	434	4320	480	4734	526
3501	389	3915	435	4329	481	4743	527
3510	390	3924	436	4338	482	4752	528
3519	391	3933	437	4347	483	4761	529
3528	392	3942	438	4356	484	4770	530
3537	393	3951	439	4365	485	4779	531
3546	394	3960	440	4374	486	4788	532
3555	395	3969	441	4383	487	4797	533
3564	396	3978	442	4392	488	4806	534
3573	397	3987	443	4401	489	4815	535
3582	398	3996	444	4410	490	4824	536
3591	399	4005	445	4419	491	4833	537
3600	400	4014	446	4428	492	4842	538
3609	401	4023	447	4437	493	4851	539
3618	402	4032	448	4446	494	4860	540
3627	403	4041	449	4455	495	4869	541
3636	404	4050	450	4464	496	4878	542
3645	405	4059	451	4473	497	4887	543

Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.	Sq. Ft.	Sq. Yds.
4896	544	5310	590	5724	636	6138	682
4905	545	5319	591	5733	637	6147	683
4914	546	5328	592	5742	638	6156	684
4923	547	5337	593	5751	639	6165	685
4932	548	5346	594	5760	640	6174	686
4941	549	5355	595	5769	641	6183	687
4950	550	5364	596	5778	642	6192	688
4959	551	5373	597	5787	643	6201	689
4968	552	5382	598	5796	644	6210	690
4977	553	5391	599	5805	645	6219	691
4986	554	5400	600	5814	646	6228	692
4995	555	5409	601	5823	647	6237	693
5004	556	5418	602	5832	648	6246	694
5013	557	5427	603	5841	649	6255	695
5022	558	5436	604	5850	650	6264	696
5031	559	5445	605	5859	651	6273	697
5040	560	5454	606	5868	652	6282	698
5049	561	5463	607	5877	653	6291	699
5058	562	5472	608	5886	654	6300	700
5067	563	5481	609	5895	655	6309	701
5076	564	5490	610	5904	656	6318	702
5085	565	5499	611	5913	657	6327	703
5094	566	5508	612	5922	658	6336	704
5103	567	5517	613	5931	659	6345	705
5112	568	5526	614	5940	660	6354	706
5121	569	5535	615	5949	661	6363	707
5130	570	5544	616	5958	662	6372	708
5139	571	5553	617	5967	663	6381	709
5148	572	5562	618	5976	664	6390	710
5157	573	5571	619	5985	665	6399	711
5166	574	5580	620	5994	666	6408	712
5175	575	5589	621	6003	667	6417	713
5184	576	5598	622	6012	668	6426	714
5193	577	5607	623	6021	669	6435	715
5202	578	5616	624	6030	670	6444	716
5211	579	5625	625	6039	671	6453	717
5220	580	5634	626	6048	672	6462	718
5229	581	5643	627	6057	673	6471	719
5238	582	5652	628	6066	674	6480	720
5247	583	5661	629	6075	675	6489	721
5256	584	5670	630	6084	676	6498	722
5265	585	5679	631	6093	677	6507	723
5274	586	5688	632	6102	678	6516	724
5283	587	5697	633	6111	679	6525	725
5292	588	5706	634	6120	680	6534	726
5301	589	5715	635	6129	681	6543	727

Sq. Yds.	Sq. Rds.	Sq. Yds.	Sq. Rds.	Sq. Yds.	Sq. Rds.	Sq. Yds.	Sq. Rds.
1	1/36	288	8	1944	54	3600	100
2	1/18	324	9	1980	55	3636	101
3	1/12	360	10	2016	56	3672	102
4	1/9	396	11	2052	57	3708	103
4½	1/8	432	12	2088	58	3744	104
5	5/36	468	13	2124	59	3780	105
6	1/6	504	14	2160	60	3816	106
7	7/36	540	15	2196	61	3852	107
8	2/9	576	16	2232	62	3888	108
9	1/4	612	17	2268	63	3924	109
10	5/18	648	18	2304	64	3960	110
11	11/36	684	19	2340	65	3996	111
12	1/3	720	20	2376	66	4032	112
13	13/36	756	21	2412	67	4068	113
13½	3/8	792	22	2448	68	4104	114
14	7/18	828	23	2484	69	4140	115
15	5/12	864	24	2520	70	4176	116
16	4/9	900	25	2556	71	4212	117
17	17/36	936	26	2592	72	4248	118
18	1/2	972	27	2628	73	4284	119
19	19/36	1008	28	2664	74	4320	120
20	5/9	1044	29	2700	75	4356	121
21	7/12	1080	30	2736	76	4392	122
22	11/18	1116	31	2772	77	4428	123
22½	5/8	1152	32	2808	78	4464	124
23	23/36	1188	33	2844	79	4500	125
24	2/3	1224	34	2880	80	4536	126
25	25/36	1260	35	2916	81	4572	127
26	13/18	1296	36	2952	82	4608	128
27	3/4	1332	37	2988	83	4644	129
28	7/9	1368	38	3024	84	4680	130
29	29/36	1404	39	3060	85	4716	131
30	5/6	1440	40	3096	86	4752	132
31	31/36	1476	41	3132	87	4788	133
31½	7/8	1512	42	3168	88	4824	134
32	8/9	1548	43	3204	89	4860	135
33	11/12	1584	44	3240	90	4896	136
34	17/18	1620	45	3276	91	4932	137
35	35/36	1656	46	3312	92	4968	138
36	1	1692	47	3348	93	5004	139
72	2	1728	48	3384	94	5040	140
108	3	1764	49	3420	95	5076	141
144	4	1800	50	3456	96	5112	142
180	5	1836	51	3492	97	5148	143
216	6	1872	52	3528	98	5184	144
252	7	1908	53	3564	99	5220	145

TABLE V.

SHOWING THE PRICE OR COST OF ANY NUMBER OF SQUARE FEET AND SQUARE YARDS, AT ANY GIVEN PRICE PER ROOD.

EXPLANATION OF THE TABLE.

The following Table shows the price of any number of square feet from 1 to 8 feet, and of any number of square yards, from 1 to 35 yards, at any given price per rood, of 36 yards in length, and one yard in breadth, from 1 penny to 12 pounds per rood.

The first or left hand column of each page, contains yards and feet, and the other columns contain the price thereof, at the rates per rood, marked on the top of the columns. £ stands for pounds, *s.* for shillings, *d.* for pence, 12*ths.* for twelfths of a penny.

EXAMPLES.

1. If a rood cost sevenpence, what will 27 square yards cost at the same rate? Look on the top of the columns for sevenpence, and in the left hand column of the same page for 27 feet, opposite to which in the column under sevenpence, you will find 5, 3, or 5 pence and three-twelfths of a penny, or one farthing.

2. If a rood cost four shillings, what will 13 yards 2 feet cost? Look on the top of the page for four shillings, and in the left hand column of the same page for 13 yards; opposite the latter, in the column under four shillings, you will find,..... 1 5 4

look again in the left hand column for 2 feet, opposite thereto, and under four shillings, you will find,..... 0 3

which added to the former makes,..... 1 5 7

or one shilling, fivepence, and seven-twelfths of a penny, being rather more than one halfpenny.

3. If a rood cost ten shillings and ninepence, what will 23 yards cost? As you will not find that price in the table, look at the top of the columns for ten shillings, and in the left hand column of the same page for 23 yards; opposite to the last mentioned, and under ten shillings, you will find,..... 6 4 8

look again at the top of the columns for ninepence, and in the left hand column of the same page for 23 yards, opposite which under ninepence, you will find,..... 5 9

which added to the former makes,..... 6 10 5

or six shillings, tenpence, and five-twelfths of a penny, or nearly one halfpenny, the price of the 23 yards.

YARDS.	At 1*d.* per Rood.		At 2*d.* per Rood.		At 3*d.* per Rood.		At 4*d.* per Rood.		At 5*d.* per Rood.	
	d.	12*ths.*	*d.*	12*ths.*	*d.*	12*ths.*	*d.*	12*ths.*	*d.*	12*ths.*
1	0	0	0	0	0	1	0	1	0	1
2	0	0	0	1	0	2	0	2	0	3
3	0	1	0	2	0	3	0	4	0	5
4	0	1	0	2	0	4	0	5	0	6
5	0	1	0	3	0	5	0	6	0	8
6	0	2	0	4	0	6	0	8	0	10
7	0	2	0	4	0	7	0	9	0	11
8	0	2	0	5	0	8	0	10	1	1
9	0	3	0	6	0	9	1	0	1	3
10	0	3	0	6	0	10	1	1	1	4
11	0	3	0	7	0	11	1	2	1	6
12	0	4	0	8	1	0	1	4	1	8
13	0	4	0	8	1	1	1	5	1	9
14	0	4	0	9	1	2	1	6	1	11
15	0	5	0	10	1	3	1	8	2	1
16	0	5	0	10	1	4	1	9	2	2
17	0	5	0	11	1	5	1	10	2	4
18	0	6	1	0	1	6	2	0	2	6
19	0	6	1	0	1	7	2	1	2	7
20	0	6	1	1	1	8	2	2	2	9
21	0	7	1	2	1	9	2	4	2	11
22	0	7	1	2	1	10	2	5	3	0
23	0	7	1	3	1	11	2	6	3	2
24	0	8	1	4	2	0	2	8	3	4
25	0	8	1	4	2	1	2	9	3	5
26	0	8	1	5	2	2	2	10	3	7
27	0	9	1	6	2	3	3	0	3	9
28	0	9	1	6	2	4	3	1	3	10
29	0	9	1	7	2	5	3	2	4	0
30	0	10	1	8	2	6	3	4	4	2
31	0	10	1	8	2	7	3	5	4	3
32	0	10	1	9	2	8	3	6	4	5
33	0	11	1	10	2	9	3	8	4	7
34	0	11	1	10	2	10	3	9	4	8
35	0	11	1	11	2	11	3	10	4	10
FEET.	*d.*	12*ths.*	*d.*	12*ths.*	*d.*	12*ths.*	*d.*	12*ths.*	*d.*	12*ths.*
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	1
6	0	0	0	0	0	0	0	0	0	1
7	0	0	0	0	0	0	0	1	0	1
8	0	0	0	0	0	0	0	1	0	1

YARDS.	At 6*d.* per Rood.	At 7*d.* per Rood.	At 8*d.* per Rood.	At 9*d.* per Rood.	At 10*d.* per Rood
	d. 12*ths.*	*d.* 12*ths.*	*d.* 12*ths.*	*d.* 12*ths.*	*d.* 12*ths.*
1	0 2	0 2	0 2	0 3	0 3
2	0 4	0 4	0 5	0 6	0 6
3	0 6	0 7	0 8	0 9	0 10
4	0 8	0 9	0 10	1 0	1 1
5	0 10	0 11	1 1	1 3	1 4
6	1 0	1 2	1 4	1 6	1 8
7	1 2	1 4	1 6	1 9	1 11
8	1 4	1 6	1 9	2 0	2 2
9	1 6	1 9	2 0	2 3	2 6
10	1 8	1 11	2 2	2 6	2 9
11	1 10	2 1	2 5	2 9	3 0
12	2 0	2 4	2 8	3 0	3 4
13	2 2	2 6	2 10	3 3	3 7
14	2 4	2 8	3 1	3 6	3 10
15	2 6	2 11	3 4	3 9	4 2
16	2 8	3 1	3 6	4 0	4 5
17	2 10	3 3	3 9	4 3	4 8
18	3 0	3 6	4 0	4 6	5 0
19	3 2	3 8	4 2	4 9	5 3
20	3 4	3 10	4 5	5 0	5 6
21	3 6	4 1	4 8	5 3	5 10
22	3 8	4 3	4 10	5 6	6 1
23	3 10	4 5	5 1	5 9	6 4
24	4 0	4 8	5 4	6 0	6 8
25	4 2	4 10	5 6	6 3	6 11
26	4 4	5 0	5 9	6 6	7 2
27	4 6	5 3	6 0	6 9	7 6
28	4 8	5 5	6 2	7 0	7 9
29	4 10	5 7	6 5	7 3	8 0
30	5 0	5 10	6 8	7 6	8 4
31	5 2	6 0	6 10	7 9	8 7
32	5 4	6 2	7 1	8 0	8 10
33	5 6	6 5	7 4	8 3	9 2
34	5 8	6 7	7 6	8 6	9 5
35	5 10	6 9	7 9	8 9	9 8
FEET.	*d.* 12*ths.*	*d.* 12*ths.*	*d.* 12*ths.*	*d.* 12*ths.*	*d.* 12*ths.*
1	0 0	0 0	0 0	0 0	0 0
2	0 0	0 0	0 0	0 0	0 0
3	0 0	0 0	0 0	0 1	0 1
4	0 1	0 1	0 1	0 1	0 1
5	0 1	0 1	0 1	0 1	0 1
6	0 1	0 1	0 1	0 2	0 2
7	0 1	0 1	0 2	0 2	0 2
8	0 1	0 2	0 2	0 2	0 3

YARDS	At 1*d.* per Rood.		At 1*s.* per Rood.		At 2*s.* per Rood.			At 3*s.* per Rood.			At 4*s.* per Rood.	
	d.	12*ths.*	*d.*	12*ths.*	*s.*	*d.*	12*ths*	*s.*	*d.*	12*ths*	*s.*	*d.* 12*ths*
1	0	3	0	4	0	0	8	0	1	0	0	1 4
2	0	7	0	8	0	1	4	0	2	0	0	2 8
3	0	11	1	0	0	2	0	0	3	0	0	4 0
4	1	2	1	4	0	2	8	0	4	0	0	5 4
5	1	6	1	8	0	3	4	0	5	0	0	6 8
6	1	10	2	0	0	4	0	0	6	0	0	8 0
7	2	1	2	4	0	4	8	0	7	0	0	9 4
8	2	5	2	8	0	5	4	0	8	0	0	10 8
9	2	9	3	0	0	6	0	0	9	0	1	0 0
10	3	0	3	4	0	6	8	0	10	0	1	1 4
11	3	4	3	8	0	7	4	0	11	0	1	2 8
12	3	8	4	0	0	8	0	1	0	0	1	4 0
13	3	11	4	4	0	8	8	1	1	0	1	5 4
14	4	3	4	8	0	9	4	1	2	0	1	6 8
15	4	7	5	0	0	10	0	1	3	0	1	8 0
16	4	10	5	4	0	10	8	1	4	0	1	9 4
17	5	2	5	8	0	11	4	1	5	0	1	10 8
18	5	6	6	0	1	0	0	1	6	0	2	0 0
19	5	9	6	4	1	0	8	1	7	0	2	1 4
20	6	1	6	8	1	1	4	1	8	0	2	2 8
21	6	5	7	0	1	2	0	1	9	0	2	4 0
22	6	8	7	4	1	2	8	1	10	0	2	5 4
23	7	0	7	8	1	3	4	1	11	0	2	6 8
24	7	4	8	0	1	4	0	2	0	0	2	8 0
25	7	7	8	4	1	4	8	2	1	0	2	9 4
26	7	11	8	8	1	5	4	2	2	0	2	10 8
27	8	3	9	0	1	6	0	2	3	0	3	0 0
28	8	6	9	4	1	6	8	2	4	0	3	1 4
29	8	10	9	8	1	7	4	2	5	0	3	2 8
30	9	2	10	0	1	8	0	2	6	0	3	4 0
31	9	5	10	4	1	8	8	2	7	0	3	5 4
32	9	9	10	8	1	9	4	2	8	0	3	6 8
33	10	1	11	0	1	10	0	2	9	0	3	8 0
34	10	4	11	4	1	10	8	2	10	0	3	9 4
35	10	8	11	8	1	11	4	2	11	0	3	10 8

FEET.	*d.*	12*ths.*	*d.*	12*ths.*	*s.*	*d.*	12*ths*	*s.*	*d.*	12*ths*	*s.*	*d.* 12*ths*
1	0	0	0	0	0	0	0	0	0	1	0	0 1
2	0	0	0	0	0	0	1	0	0	2	0	0 3
3	0	1	0	1	0	0	2	0	0	4	0	0 5
4	0	1	0	1	0	0	3	0	0	5	0	0 7
5	0	2	0	2	0	0	4	0	0	6	0	0 8
6	0	2	0	2	0	0	5	0	0	8	0	0 10
7	0	2	0	3	0	0	6	0	0	9	0	1 0
8	0	3	0	3	0	0	7	0	0	10	0	1 2

YARDS.	At 5s. per Rood.			At 6s. per Rood.			At 7s. per Rood.			At 8s. per Rood.			At 9s. per Rood.		
	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths
1	0	1	8	0	2	0	0	2	4	0	2	8	0	3	0
2	0	3	4	0	4	0	0	4	8	0	5	4	0	6	0
3	0	5	0	0	6	0	0	7	0	0	8	0	0	9	0
4	0	6	8	0	8	0	0	9	4	0	10	8	1	0	0
5	0	8	4	0	10	0	0	11	8	1	1	4	1	3	0
6	0	10	0	1	0	0	1	2	0	1	4	0	1	6	0
7	0	11	8	1	2	0	1	4	4	1	6	8	1	9	0
8	1	1	4	1	4	0	1	6	8	1	9	4	2	0	0
9	1	3	0	1	6	0	1	9	0	2	0	0	2	3	0
10	1	4	8	1	8	0	1	11	4	2	2	8	2	6	0
11	1	6	4	1	10	0	2	1	8	2	5	4	2	9	0
12	1	8	0	2	0	0	2	4	0	2	8	0	3	0	0
13	1	9	8	2	2	0	2	6	4	2	10	8	3	3	0
14	1	11	4	2	4	0	2	8	8	3	1	4	3	6	0
15	2	1	0	2	6	0	2	11	0	3	4	0	3	9	0
16	2	2	8	2	8	0	3	1	4	3	6	8	4	0	0
17	2	4	4	2	10	0	3	3	8	3	9	4	4	3	0
18	2	6	0	3	0	0	3	6	0	4	0	0	4	6	0
19	2	7	8	3	2	0	3	8	4	4	2	8	4	9	0
20	2	9	4	3	4	0	3	10	8	4	5	4	5	0	0
21	2	11	0	3	6	0	4	1	0	4	8	0	5	3	0
22	3	0	8	3	8	0	4	3	4	4	10	8	5	6	0
23	3	2	4	3	10	0	4	5	8	5	1	4	5	9	0
24	3	4	0	4	0	0	4	8	0	5	4	0	6	0	0
25	3	5	8	4	2	0	4	10	4	5	6	8	6	3	0
26	3	7	4	4	4	0	5	0	8	5	9	4	6	6	0
27	3	9	0	4	6	0	5	3	0	6	0	0	6	9	0
28	3	10	8	4	8	0	5	5	4	6	2	8	7	0	0
29	4	0	4	4	10	0	5	7	8	6	5	4	7	3	0
30	4	2	0	5	0	0	5	10	0	6	8	0	7	6	0
31	4	3	8	5	2	0	6	0	4	6	10	8	7	9	0
32	4	5	4	5	4	0	6	2	8	7	1	4	8	0	0
33	4	7	9	5	6	0	6	5	0	7	4	0	8	3	0
34	4	8	8	5	8	0	6	7	4	7	6	8	8	6	0
35	4	10	4	5	10	0	6	9	8	7	9	4	8	9	0
FEET.	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths
1	0	0	2	0	0	2	0	0	3	0	0	3	0	0	4
2	0	0	4	0	0	5	0	0	6	0	0	7	0	0	8
3	0	0	6	0	0	8	0	0	9	0	0	10	0	1	0
4	0	0	8	0	0	10	0	1	0	0	1	2	0	1	4
5	0	0	11	0	1	1	0	1	3	0	1	5	0	1	8
6	0	1	1	0	1	4	0	1	6	0	1	9	0	2	0
7	0	1	3	0	1	6	0	1	9	0	2	0	0	2	4
8	0	1	5	0	1	9	0	2	0	0	2	4	0	2	8

YARDS.	At 10s. per Rood.			At 11s. per Rood.			At 12s. per Rood.			At 13s. per Rood.			At 14s. per Rood.		
	s.	d.	12ths	s.	d	12ths	s.	d.	12ths	s.	d.	12ths	s.	d	12ths
1	0	3	4	0	3	8	0	4	0	0	4	4	0	4	8
2	0	6	8	0	7	4	0	8	0	0	8	8	0	9	4
3	0	10	0	0	11	0	1	0	0	1	1	0	1	2	0
4	1	1	4	1	2	8	1	4	0	1	5	4	1	6	8
5	1	4	8	1	6	4	1	8	0	1	9	8	1	11	4
6	1	8	0	1	10	0	2	0	0	2	2	0	2	4	0
7	1	11	4	2	1	8	2	4	0	2	6	4	2	8	8
8	2	2	8	2	5	4	2	8	0	2	10	8	3	1	4
9	2	6	0	2	9	0	3	0	0	3	3	0	3	6	0
10	2	9	4	3	0	8	3	4	0	3	7	4	3	10	8
11	3	0	8	3	4	4	3	8	0	3	11	8	4	3	4
12	3	4	0	3	8	0	4	0	0	4	4	0	4	8	0
13	3	7	4	3	11	8	4	4	0	4	8	4	5	0	8
14	3	10	8	4	3	4	4	8	0	5	0	8	5	5	4
15	4	2	0	4	7	0	5	0	0	5	5	0	5	10	0
16	4	5	4	4	10	8	5	4	0	5	9	4	6	2	8
17	4	8	8	5	2	4	5	8	0	6	1	8	6	7	4
18	5	0	0	5	6	0	6	0	0	6	6	0	7	0	0
19	5	3	4	5	9	8	6	4	0	6	10	4	7	4	8
20	5	6	8	6	1	4	6	8	0	7	2	8	7	9	4
21	5	10	0	6	5	0	7	0	0	7	7	0	8	2	0
22	6	1	4	6	8	8	7	4	0	7	11	4	8	6	8
23	6	4	8	7	0	4	7	8	0	8	3	8	8	11	4
24	6	8	0	7	4	0	8	0	0	8	8	0	9	4	0
25	6	11	4	7	7	8	8	4	0	9	0	4	9	8	8
26	7	2	8	7	11	4	8	8	0	9	4	8	10	1	4
27	7	6	0	8	3	0	9	0	0	9	9	0	10	6	0
28	7	9	4	8	6	8	9	4	0	10	1	4	10	10	8
29	8	0	8	8	10	4	9	8	0	10	5	8	11	3	4
30	8	4	0	9	2	0	10	0	0	10	10	0	11	8	0
31	8	7	4	9	5	8	10	4	0	11	2	4	12	0	8
32	8	10	8	9	9	4	10	8	0	11	6	8	12	5	4
33	9	2	0	10	1	0	11	0	0	11	11	0	12	10	0
34	9	5	4	10	4	8	11	4	0	12	3	4	13	2	8
35	9	8	8	10	8	4	11	8	0	12	7	8	13	7	4
FEET.	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths
1	0	0	4	0	0	4	0	0	5	0	0	5	0	0	6
2	0	0	8	0	0	9	0	0	10	0	0	11	0	1	0
3	0	1	1	0	1	2	0	1	4	0	1	5	0	1	6
4	0	1	5	0	1	7	0	1	9	0	1	11	0	2	0
5	0	1	10	0	2	0	0	2	2	0	2	4	0	2	7
6	0	2	2	0	2	5	0	2	8	0	2	10	0	3	1
7	0	2	7	0	2	10	0	3	1	0	3	4	0	3	7
8	0	2	11	0	3	3	0	3	6	0	3	10	0	4	1

YARDS.	At 15s. per Rood.			At 16s. per Rood.			At 17s. per Rood.			At 18s. per Rood.			At 19s. per Rood.		
	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths
1	0	5	0	0	5	4	0	5	8	0	6	0	0	6	4
2	0	10	0	0	10	8	0	11	4	1	0	0	1	0	8
3	1	3	0	1	4	0	1	5	0	1	6	0	1	7	0
4	1	8	0	1	9	4	1	10	8	2	0	0	2	1	4
5	2	1	0	2	2	8	2	4	4	2	6	0	2	7	8
6	2	6	0	2	8	0	2	10	0	3	0	0	3	2	0
7	2	11	0	3	1	4	3	3	8	3	6	0	3	8	4
8	3	4	0	3	6	8	3	9	4	4	0	0	4	2	8
9	3	9	0	4	0	0	4	3	0	4	6	0	4	9	0
10	4	2	0	4	5	4	4	8	8	5	0	0	5	3	4
11	4	7	0	4	10	8	5	2	4	5	6	0	5	9	8
12	5	0	0	5	4	0	5	8	0	6	0	0	6	4	0
13	5	5	0	5	9	4	6	1	8	6	6	0	6	10	4
14	5	10	0	6	2	8	6	7	4	7	0	0	7	4	8
15	6	3	0	6	8	0	7	1	0	7	6	0	7	11	0
16	6	8	0	7	1	4	7	6	8	8	0	0	8	5	4
17	7	1	0	7	6	8	8	0	4	8	6	0	8	11	8
18	7	6	0	8	0	0	8	6	0	9	0	0	9	6	0
19	7	11	0	8	5	4	8	11	8	9	6	0	10	0	4
20	8	4	0	8	10	8	9	5	4	10	0	0	10	6	8
21	8	9	0	9	4	0	9	11	0	10	6	0	11	1	0
22	9	2	0	9	9	4	10	4	8	11	0	0	11	7	4
23	9	7	0	10	2	8	10	10	4	11	6	0	12	1	8
24	10	0	0	10	8	0	11	4	0	12	0	0	12	8	0
25	10	5	0	11	1	4	11	9	8	12	6	0	13	2	4
26	10	10	0	11	6	8	12	3	4	13	0	0	13	8	8
27	11	3	0	12	0	0	12	9	0	13	6	0	14	3	0
28	11	8	0	12	5	4	13	2	8	14	0	0	14	9	4
29	12	1	0	12	10	8	13	8	4	14	6	0	15	3	8
30	12	6	0	13	4	0	14	2	0	15	0	0	15	10	0
31	12	11	0	13	9	4	14	7	8	15	6	0	16	4	4
32	13	4	0	14	2	8	15	1	4	16	0	0	16	10	8
33	13	9	0	14	8	0	15	7	0	16	6	0	17	5	0
34	14	2	0	15	1	4	16	0	8	17	0	0	17	11	4
35	14	7	0	15	6	8	16	6	4	17	6	0	18	5	8

FEET.	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths	s.	d.	12ths
1	0	0	6	0	0	7	0	0	7	0	0	8	0	0	8
2	0	1	1	0	1	2	0	1	3	0	1	4	0	1	4
3	0	1	8	0	1	9	0	1	10	0	2	0	0	2	1
4	0	2	2	0	2	4	0	2	6	0	2	8	0	2	9
5	0	2	9	0	2	11	0	3	1	0	3	4	0	3	6
6	0	3	4	0	3	6	0	3	9	0	4	0	0	4	2
7	0	3	10	0	4	1	0	4	4	0	4	8	0	4	11
8	0	4	5	0	4	8	0	5	0	0	5	4	0	5	7

YARDS.	At £1 per Rood.			At £2 per Rood.			At £3 per Rood.			At £4 per Rood.		
	s.	*d.*	12*ths*	£	*s.*	*d.* 12*ths*	£	*s.*	*d.* 12*ths*	£	*s.*	*d.* 12*ths*
1	0	6	8	0	1	1 4	0	1	8 0	0	2	2 8
2	1	1	4	0	2	2 8	0	3	4 0	0	4	5 4
3	1	8	0	0	3	4 0	0	5	0 0	0	6	8 0
4	2	2	8	0	4	5 4	0	6	8 0	0	8	10 8
5	2	9	4	0	5	6 8	0	8	4 0	0	11	1 4
6	3	4	0	0	6	8 0	0	10	0 0	0	13	4 0
7	3	10	8	0	7	9 4	0	11	8 0	0	15	6 8
8	4	5	4	0	8	10 8	0	13	4 0	0	17	9 4
9	5	0	0	0	10	0 0	0	15	0 0	1	0	0 0
10	5	6	8	0	11	1 4	0	16	8 0	1	2	2 8
11	6	1	4	0	12	2 8	0	18	4 0	1	4	5 4
12	6	8	0	0	13	4 0	1	0	0 0	1	6	8 0
13	7	2	8	0	14	5 4	1	1	8 0	1	8	10 8
14	7	9	4	0	15	6 8	1	3	4 0	1	11	1 4
15	8	4	0	0	16	8 0	1	5	0 0	1	13	4 0
16	8	10	8	0	17	9 4	1	6	8 0	1	15	6 8
17	9	5	4	0	18	10 8	1	8	4 0	1	17	9 4
18	10	0	0	1	0	0 0	1	10	0 0	2	0	0 0
19	10	6	8	1	1	1 4	1	11	8 0	2	2	2 8
20	11	1	4	1	2	2 8	1	13	4 0	2	4	5 4
21	11	8	0	1	3	4 0	1	15	0 0	2	6	8 0
22	12	2	8	1	4	5 4	1	16	8 0	2	8	10 8
23	12	9	4	1	5	6 8	1	18	4 0	2	11	1 4
24	13	4	0	1	6	8 0	2	0	0 0	2	13	4 0
25	13	10	8	1	7	9 4	2	1	8 0	2	15	6 8
26	14	5	4	1	8	10 8	2	3	4 0	2	17	9 4
27	15	0	0	1	10	0 0	2	5	0 0	3	0	0 0
28	15	6	8	1	11	1 4	2	6	8 0	3	2	2 8
29	16	1	4	1	12	2 8	2	8	4 0	3	4	5 4
30	16	8	0	1	13	4 0	2	10	0 0	3	6	8 0
31	17	2	8	1	14	5 4	2	11	8 0	3	8	10 8
32	17	9	4	1	15	6 8	2	13	4 0	3	11	1 4
33	18	4	0	1	16	8 0	2	15	0 0	3	13	4 0
34	18	10	8	1	17	9 4	2	16	8 0	3	15	6 8
35	19	5	4	1	18	10 8	2	18	4 0	3	17	9 4

FEET.	*s.*	*d.*	12*ths*	£	*s.*	*d.* 12*ths*	£	*s.*	*d.* 12*ths*	£	*s.*	*d.* 12*ths*
1	0	0	8	0	0	1 5	0	0	2 2	0	0	2 11
2	0	1	5	0	0	2 11	0	0	4 5	0	0	5 11
3	0	2	2	0	0	4 5	0	0	6 8	0	0	8 10
4	0	2	11	0	0	5 11	0	0	8 10	0	0	11 10
5	0	3	8	0	0	7 4	0	0	11 1	0	1	2 10
6	0	4	5	0	0	8 10	0	1	1 4	0	1	5 9
7	0	5	2	0	0	10 4	0	1	3 6	0	1	8 9
8	0	5	11	0	0	11 10	0	1	5 9	0	1	11 8

YARDS.	At £5 per Rood.				At £6 per Rood.				At £7 per Rood.				At £8 per Rood.			
	£	s.	d.	12ths	£	s.	d.	12ths	£	s.	d.	12ths	£	s.	d.	12ths
1	0	2	9	4	0	3	4	0	0	3	10	8	0	4	5	4
2	0	5	6	8	0	6	8	0	0	7	9	4	0	8	10	8
3	0	8	4	0	0	10	0	0	0	11	8	0	0	13	4	0
4	0	11	1	4	0	13	4	0	0	15	6	8	0	17	9	4
5	0	13	10	8	0	16	8	0	0	19	5	4	1	2	2	8
6	0	16	8	0	1	0	0	0	1	3	4	0	1	6	8	0
7	0	19	5	4	1	3	4	0	1	7	2	8	1	11	1	4
8	1	2	2	8	1	6	8	0	1	11	1	4	1	15	6	8
9	1	5	0	0	1	10	0	0	1	15	0	0	2	0	0	0
10	1	7	9	4	1	13	4	0	1	18	10	8	2	4	5	4
11	1	10	6	8	1	16	8	0	2	2	9	4	2	8	10	8
12	1	13	4	0	2	0	0	0	2	6	8	0	2	13	4	0
13	1	16	1	4	2	3	4	0	2	10	6	8	2	17	9	4
14	1	18	10	8	2	6	8	0	2	14	5	4	3	2	2	8
15	2	1	8	0	2	10	0	0	2	18	4	0	3	6	8	0
16	2	4	5	4	2	13	4	0	3	2	2	8	3	11	1	4
17	2	7	2	8	2	16	8	0	3	6	1	4	3	15	6	8
18	2	10	0	0	3	0	0	0	3	10	0	0	4	0	0	0
19	2	12	9	4	3	3	4	0	3	13	10	8	4	4	5	4
20	2	15	6	8	3	6	8	0	3	17	9	4	4	8	10	8
21	2	18	4	0	3	10	0	0	4	1	8	0	4	13	4	0
22	3	1	1	4	3	13	4	0	4	5	6	8	4	17	9	4
23	3	3	10	8	3	16	8	0	4	9	5	4	5	2	2	8
24	3	6	8	0	4	0	0	0	4	13	4	0	5	6	8	0
25	3	9	5	4	4	3	4	0	4	17	2	8	5	11	1	4
26	3	12	2	8	4	6	8	0	5	1	1	4	5	15	6	8
27	3	15	0	0	4	10	0	0	5	5	0	0	6	0	0	0
28	3	17	9	4	4	13	4	0	5	8	10	8	6	4	5	4
29	4	0	6	8	4	16	8	0	5	12	9	4	6	8	10	8
30	4	3	4	0	5	0	0	0	5	16	8	0	6	13	4	0
31	4	6	1	4	5	3	4	0	6	0	6	8	6	17	9	4
32	4	8	10	8	5	6	8	0	6	4	5	4	7	2	2	8
33	4	11	8	0	5	10	0	0	6	8	4	0	7	6	8	0
34	4	14	5	4	5	13	4	0	6	12	2	8	7	11	1	4
35	4	17	2	8	5	16	8	0	6	16	1	4	7	15	6	8
FEET.	£	s.	d.	12ths	£	s.	d.	12ths	£	s.	d.	12ths	£	s.	d.	12ths
1	0	0	3	8	0	0	4	5	0	0	5	2	0	0	5	11
2	0	0	7	4	0	0	8	10	0	0	10	4	0	0	11	10
3	0	0	11	1	0	1	1	4	0	1	3	6	0	1	5	9
4	0	1	2	9	0	1	5	9	0	1	8	8	0	1	11	8
5	0	1	6	6	0	1	10	2	0	2	1	11	0	2	5	7
6	0	1	10	2	0	2	2	8	0	2	7	1	0	2	11	6
7	0	2	1	11	0	2	7	1	0	3	0	3	0	3	5	5
8	0	2	5	7	0	2	11	6	0	3	5	5	0	3	11	4

YARDS.	At £9 per Rood.				At £10 per Rood.				At £11 per Rood.				At £12 per Rood.			
	£	s.	d.	12ths	£	s.	d.	12ths	£	s.	d.	12ths	£	s.	d.	12ths
1	0	5	0	0	0	5	6	8	0	6	1	4	0	6	8	0
2	0	10	0	0	0	11	1	4	0	12	2	8	0	13	4	0
3	0	15	0	0	0	16	8	0	0	18	4	0	1	0	0	0
4	1	0	0	0	1	2	2	8	1	4	5	4	1	6	8	0
5	1	5	0	0	1	7	9	4	1	10	6	8	1	13	4	0
6	1	10	0	0	1	13	4	0	1	16	8	0	2	0	0	0
7	1	15	0	0	1	18	10	8	2	2	9	4	2	6	8	0
8	2	0	0	0	2	4	5	4	2	8	10	8	2	13	4	0
9	2	5	0	0	2	10	0	0	2	15	0	0	3	0	0	0
10	2	10	0	0	2	15	6	8	3	1	1	4	3	6	8	0
11	2	15	0	0	3	1	1	4	3	7	2	8	3	13	4	0
12	3	0	0	0	3	6	8	0	3	13	4	0	4	0	0	0
13	3	5	0	0	3	12	2	8	3	19	5	4	4	6	8	0
14	3	10	0	0	3	17	9	4	4	5	6	8	4	13	4	0
15	3	15	0	0	4	3	4	0	4	11	8	0	5	0	0	0
16	4	0	0	0	4	8	10	8	4	17	9	4	5	6	8	0
17	4	5	0	0	4	14	5	4	5	3	10	8	5	13	4	0
18	4	10	0	0	5	0	0	0	5	10	0	0	6	0	0	0
19	4	15	0	0	5	5	6	8	5	16	1	4	6	6	8	0
20	5	0	0	0	5	11	1	4	6	2	2	8	6	13	4	0
21	5	5	0	0	5	16	8	0	6	8	4	0	7	0	0	0
22	5	10	0	0	6	2	2	8	6	14	5	4	7	6	8	0
23	5	15	0	0	6	7	9	4	7	0	6	8	7	13	4	0
24	6	0	0	0	6	13	4	0	7	6	8	0	8	0	0	0
25	6	5	0	0	6	18	10	8	7	12	9	4	8	6	8	0
26	6	10	0	0	7	4	5	4	7	18	10	8	8	13	4	0
27	6	15	0	0	7	10	0	0	8	5	0	0	9	0	0	0
28	7	0	0	0	7	15	6	8	8	11	1	4	9	6	8	0
29	7	5	0	0	8	1	1	4	8	17	2	8	9	13	4	0
30	7	10	0	0	8	6	8	0	9	3	4	0	10	0	0	0
31	7	15	0	0	8	12	2	8	9	9	5	4	10	6	8	0
32	8	0	0	0	8	17	9	4	9	15	6	8	10	13	4	0
33	8	5	0	0	9	3	4	0	10	1	8	0	11	0	0	0
34	8	10	0	0	9	8	10	8	10	7	9	4	11	6	8	0
35	8	15	0	0	9	14	5	4	10	13	10	8	11	13	4	0
FEET.	£	s.	d.	12ths	£	s.	d.	12ths	£	s.	d.	12ths	£	s.	d.	12ths
1	0	0	6	8	0	0	7	4	0	0	8	1	0	0	8	10
2	0	1	1	4	0	1	2	9	0	1	4	3	0	1	5	9
3	0	1	8	0	0	1	10	2	0	2	0	5	0	2	2	8
4	0	2	2	8	0	2	5	7	0	2	8	7	0	2	11	6
5	0	2	9	4	0	3	1	0	0	3	4	8	0	3	8	5
6	0	3	4	0	0	3	8	5	0	4	0	10	0	4	5	4
7	0	3	10	8	0	4	3	10	0	4	9	0	0	5	2	2
8	0	4	5	4	0	4	11	3	0	5	5	2	0	5	11	1

TABLE VI.

SHOWING THE VALUE OF A FOOT IN LENGTH OF TIMBER, STONE, &c., CUT TO ANY SIZE OR SCANTLING, AT PRICES FROM 1s. 6D., TO 7s. PER CUBIC FOOT.

EXPLANATION OF THE TABLE.

When the price of a cubic or solid foot of timber, stone, &c., is known, the following Table will show the price of a foot in length, at any breadth and depth, from 2 inches by 2 inches, to 12 inches by 11½ inches, advancing by ½ inches, at the several rates of 1*s.* 6*d.*, 2*s.*, 2*s.* 6*d.*, 3*s.*, 3*s.* 6*d.*, 4*s.*, 4*s.* 6*d.*, 5*s.*, 5*s.* 6*d.*, 6*s.*, 6*s.* 6*d.*, and 7*s.* per solid foot; and when the price of a foot is at any other rate, it will be found to any extent, from the same table, in the following manner, viz. If the price be 6*d.*, 8*d.*, 1*s.*, or 9*s.*; neither of these rates being in the table, for 6*d.*, take the third of the value, stated in the table at 1*s.* 6*d.*; for 8*d.*, take the third of the table at 2*s.*, for 1*s.* take the half of 2*s.*, and for 9*s.*, take double the amount in the table at 4*s.* 6*d.*; in a similar manner may be found the value at any greater or less price.

Should it be required to find the value of a foot in length of a scantling, one of whose sides extends beyond the table, take the half of the greatest side, if it does not exceed 24 inches; its third, if beyond 24, and not exceeding 36 inches, and so on in the same manner as far as requisite.

Find in the table the value of the lesser side by the half, or the third of the other side, which sum thus found, multiply by 2 if the half, by 3 if the third, and by 4 if the fourth of the greater side has been taken; the result will be the value of a foot in length of the scantling.

If both sides extend beyond the table, take the half of each side, which find the value of, as directed above; and multiply the value so found by 4; the product will be the value of a foot in length, as required.

If it is necessary to take the half of one side, and the

third of the other, multiply the value found in the table at these dimensions by 6, which will give the value required.

If the third of each side requires to be taken, multiply the value found in the table by 9, which will give the value of a foot in length of the scantling, at the price required.

The table extends across two pages, and each page is divided into 7 columns. The one on the left of each page contains the dimensions of the scantling. On the top of the other columns, are placed the various prices per cubic foot, under which and opposite the dimensions of the given scantling, is the value of a foot in length at the required price.

The value is given in shillings, pence, and eighths of a penny, or half a farthing.

In. stands for inches, *s.* for shillings, and *d.* for pence.

EXAMPLES.

1. What is the value of a foot in length of a scantling, 8 inches broad by 10 inches deep, at 1*s.* 6*d.* per cubic or solid foot?

Look in the left hand column for 8 inches by 10, opposite which and under 1*s.* 6*d.*, in the second column, is 0 10, or tenpence, the value of a foot in length at the given dimensions and price.

2. Required the value of a piece of marble one foot in length, $9\frac{1}{2}$ inches thick, and 23 inches broad, the price of the cubic foot being 4*s.*?

As 23 inches, the breadth, extends beyond the table, take its half, or $11\frac{1}{2}$ inches, and find the value of $9\frac{1}{2}$ inches by $11\frac{1}{2}$ inches. Opposite these dimensions, and under 4*s.*, is $3\ 0\frac{3}{8}$, or 3*s.* and $\frac{3}{8}$ of a penny; which multiplied by 2, gives 6*s.* and $\frac{6}{8}$, or 6*s.* and $\frac{3}{4}d.$, the value of a foot in length, as required.

3. Required the value of a foot in length of a beam 14 inches by 21, at 3*s.* per cubic foot?

As both 14 and 21 inches are beyond the table, take the half of each, or 7 by $10\frac{1}{2}$, opposite which and under 3*s.*

stands 1*s.* $6\frac{3}{8}d.$; this multiplied by 4, gives 6*s.* $1\frac{1}{2}d.$, the value sought.

4. Required the value of a piece of mahogany a foot long, 27 inches thick, and 33 inches broad, at 13*s.* per solid foot?

In order to bring this within the compass of the table, divide the thickness and breadth by 3, giving 9 inches by 11, and as 13*s.* is not to be found in the table, take its half, 6*s.* 6*d.*; then opposite 9 inches by 11 in the table, and under 6*s.* 6*d.*, is found 4*s.* $5\frac{5}{8}d.$, and this multiplied by 9, gives 40*s.* $2\frac{5}{8}d.$, the value at 6*s.* 6*d.*, which being doubled for 13, gives 80*s.* $5\frac{1}{4}d.$, the required value.

When the required price per cubic foot is not to be found in the table, the following scale of proportional parts of the prices will be useful when the given price falls between the prices in the table.

Price per cubic foot.		Proportion of price in Table.			Price per cubic foot.		Proportion of price in Table.		
s.	*d.*		*s.*	*d.*	*s.*	*d.*		*s.*	*d.*
0	1	... $\frac{1}{18}$ of ...	1	6	2	4	$\frac{1}{2}$ of ...	7	0
0	2	... $\frac{1}{9}$	1	6	2	8	$\frac{3}{5}$	4	0
0	3	... $\frac{1}{6}$	1	6	2	9	$\frac{1}{2}$	5	6
0	4	... $\frac{1}{6}$	2	0	3	3	$\frac{1}{2}$	6	6
0	5	... $\frac{1}{6}$	2	6	3	4	$\frac{5}{8}$	5	0
0	6	... $\frac{1}{3}$	1	6	3	8	$\frac{2}{5}$	5	6
0	7	... $\frac{1}{6}$	3	6	3	9	$\frac{6}{8}$	6	0
0	8	... $\frac{1}{3}$	2	0	4	1	$\frac{7}{6}$ or $1\frac{1}{6}$ ...	3	6
0	9	... $\frac{1}{2}$	1	6	4	2	$\frac{5}{6}$	5	0
0	10	... $\frac{1}{3}$	2	6	4	3	$\frac{17}{10}$ or $1\frac{7}{10}$ ...	2	6
0	11	... $\frac{1}{6}$	5	6	4	4	$\frac{2}{3}$	6	6
1	0	... $\frac{1}{2}$	2	0	4	7	$\frac{5}{6}$	5	6
1	1	... $\frac{1}{6}$	6	6	4	8	$\frac{2}{5}$	7	0
1	2	... $\frac{1}{3}$	3	6	4	9	$\frac{19}{10}$ or $1\frac{9}{10}$ ...	2	6
1	3	... $\frac{1}{3}$	2	6	5	3	$\frac{5}{4}$	7	0
1	4	... $\frac{1}{3}$	4	0	5	4	$\frac{4}{3}$ or $1\frac{1}{3}$ ...	4	0
1	5	... $\frac{17}{18}$	1	6	5	5	$\frac{1}{1}\frac{1}{1}$ or $1\frac{1}{12}$ ...	5	0
1	8	... $\frac{3}{5}$	5	0	5	9	$\frac{2}{1}\frac{3}{2}$ or $1\frac{1}{12}$ ...	3	0
1	9	... $\frac{1}{2}$	3	6	5	10	$\frac{7}{6}$ or $1\frac{1}{6}$ ...	5	0
1	10	... $\frac{1}{3}$	5	6	6	3	$\frac{5}{4}$ or $1\frac{1}{4}$ ...	5	0
2	1	... $\frac{5}{6}$	2	6	6	5	$\frac{7}{6}$ or $1\frac{1}{6}$ ...	5	6
2	2	... $\frac{1}{3}$	6	6	6	8	$\frac{4}{3}$ or $1\frac{1}{3}$ ...	5	0
2	3	... $\frac{1}{2}$	4	6	6	9	$\frac{9}{8}$ or $1\frac{1}{8}$ ...	6	0

EXAMPLES.

1. Required the value of a foot in length, and 8 inches by 12, at 11*d.* per cubic foot?

As we cannot find 11*d.* in the table, we must look in the scale, and there we find that 11*d.* is the 6th of 5*s.* 6*d.* Then look in the table, and opposite 8 inches by 12, and under 5*s.* 6*d.* is 3*s.* 8*d.*, or the value at 5*s.* 6*d.* per cubic foot, which being divided by 6, gives $7\frac{2}{6}d.$ or $7\frac{1}{4}d.$, the value at 11*d.*, as required.

2. Required the value of a foot in length, and $7\frac{1}{2}$ inches by $9\frac{1}{2}$, at 3*s.* 5*d.* per solid foot?

By the table opposite $7\frac{1}{2}$ by $9\frac{1}{2}$, and under 3*s.*, is 1 $5\frac{3}{8}$
or the value at 3*s.* per cubic foot; we now want 5*d.* per cubic foot, which, on referring to the scale, is found to be one-sixth of 2*s.* 6*d.*

In the table opposite $7\frac{1}{2}$ by $9\frac{1}{2}$, and under 2*s.* 6*d.* is 1*s.* $2\frac{6}{8}d.$, one-sixth of which is very nearly $2\frac{1}{8}$

which being added to the former, gives the value required, 1 $8\frac{3}{8}$

3. Required the value of a foot in length, and 9 inches by $11\frac{1}{2}$, at 4*s.* 1*d.* per cubic foot?

By the scale 4*s.* 1*d.*, is found to be $\frac{7}{8}$ or $1\frac{1}{8}$ of 3*s.* 6*d.*

In the table opposite 9 by $11\frac{1}{2}$, and under 3*s.* 6*d*, is 2 $6\frac{1}{8}$
to which add one-sixth of the sum = 5

giving the value at 4*s.* 1*d.* as required, 2 $11\frac{1}{8}$

To find arithmetically the value of a foot in length of timber, stone, &c., at a given price per cubic or solid foot, having the breadth and depth given.

Rule. Multiply together the breadth and depth in inches, and that product again by the price of the solid foot in pence; divide the result by 144, and the quotient will be the answer in pence.

Example. If a cubic or solid foot of timber cost 3*s.*, what will be the cost of a foot in length, by 6 inches deep, and 7 inches broad?

6 inches, depth.
7 inches, breadth.

42
36 pence, price of a solid foot.

252
126

144)1512(10 pence.
144

72
8

576(4 eighths of a penny.
576

or $10\frac{1}{2}d.$ the answer.

Note. In calculating the following table, fractions less than eighths of a penny, or a half farthing in the value, were disregarded; but in all cases the exact value is given within less than a half farthing per foot.

SCANTLING.	1s. 6d.		2s.		2s. 6d.		3s.		3s. 6d.		4s.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
2 In. by 2	0	0 4/8	0	0 5/8	0	0 6/8	0	1	0	1 1/8	0	1 2/8
2 1/2	0	0 5/8	0	0 6/8	0	1	0	1 2/8	0	1 3/8	0	1 4/8
3	0	0 6/8	0	1	0	1 2/8	0	1 4/8	0	1 6/8	0	2
3 1/2	0	0 7/8	0	1 1/8	0	1 3/8	0	1 6/8	0	2	0	2 2/8
4	0	1	0	1 2/8	0	1 5/8	0	2	0	2 2/8	0	2 5/8
4 1/2	0	1 1/8	0	1 3/8	0	1 7/8	0	2 2/8	0	2 5/8	0	3
5	0	1 2/8	0	1 5/8	0	2	0	2 4/8	0	2 7/8	0	3 2/8
5 1/2	0	1 3/8	0	1 7/8	0	2 2/8	0	2 6/8	0	3 1/8	0	3 5/8
6	0	1 4/8	0	2	0	2 4/8	0	3	0	3 4/8	0	4
6 1/2	0	1 5/8	0	2 1/8	0	2 5/8	0	3 2/8	0	3 6/8	0	4 2/8
7	0	1 6/8	0	2 2/8	0	2 7/8	0	3 4/8	0	4	0	4 5/8
7 1/2	0	1 7/8	0	2 4/8	0	3 1/8	0	3 6/8	0	4 3/8	0	5
8	0	2	0	2 5/8	0	3 2/8	0	4	0	4 5/8	0	5 2/8
8 1/2	0	2 1/8	0	2 6/8	0	3 4/8	0	4 2/8	0	4 7/8	0	5 5/8
9	0	2 2/8	0	3	0	3 6/8	0	4 4/8	0	5 2/8	0	6
9 1/2	0	2 3/8	0	3 1/8	0	3 7/8	0	4 6/8	0	5 4/8	0	6 2/8
10	0	2 4/8	0	3 2/8	0	4 1/8	0	5	0	5 6/8	0	6 5/8
10 1/2	0	2 5/8	0	3 4/8	0	4 2/8	0	5 2/8	0	6 1/8	0	7
11	0	2 6/8	0	3 5/8	0	4 4/8	0	5 4/8	0	6 3/8	0	7 2/8
11 1/2	0	2 7/8	0	3 6/8	0	4 6/8	0	5 6/8	0	6 5/8	0	7 6/8
12	0	3	0	4	0	5	0	6	0	7	0	8
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
2 1/2 In. by 2 1/2	0	0 5/8	0	1	0	1 2/8	0	1 4/8	0	1 6/8	0	2
3	0	0 7/8	0	1 2/8	0	1 4/8	0	1 7/8	0	2 1/8	0	2 4/8
3 1/2	0	1	0	1 3/8	0	1 6/8	0	2 1/8	0	2 4/8	0	2 7/8
4	0	1 2/8	0	1 5/8	0	2	0	2 4/8	0	2 7/8	0	3 2/8
4 1/2	0	1 3/8	0	1 7/8	0	2 2/8	0	2 6/8	0	3 2/8	0	3 5/8
5	0	1 4/8	0	2	0	2 4/8	0	3 1/8	0	3 5/8	0	4 1/8
5 1/2	0	1 5/8	0	2 2/8	0	2 6/8	0	3 3/8	0	4	0	4 4/8
6	0	1 6/8	0	2 4/8	0	3 1/8	0	3 6/8	0	4 3/8	0	5
6 1/2	0	2	0	2 5/8	0	3 2/8	0	4	0	4 5/8	0	5 3/8
7	0	2 1/8	0	2 7/8	0	3 5/8	0	4 3/8	0	5	0	5 6/8
7 1/2	0	2 2/8	0	3 1/8	0	3 7/8	0	4 5/8	0	5 3/8	0	6 2/8
8	0	2 4/8	0	3 2/8	0	4 1/8	0	5	0	5 6/8	0	6 5/8
8 1/2	0	2 5/8	0	3 4/8	0	4 3/8	0	5 2/8	0	6 1/8	0	7
9	0	2 6/8	0	3 6/8	0	4 5/8	0	5 4/8	0	6 4/8	0	7 4/8
9 1/2	0	2 7/8	0	3 7/8	0	4 7/8	0	5 6/8	0	6 7/8	0	7 7/8
10	0	3 1/8	0	4 1/8	0	5 1/8	0	6 2/8	0	7 2/8	0	8 4/8
10 1/2	0	3 2/8	0	4 3/8	0	5 3/8	0	6 4/8	0	7 5/8	0	8 6/8
11	0	3 3/8	0	4 4/8	0	5 5/8	0	6 6/8	0	8	0	9 1/8
11 1/2	0	3 4/8	0	4 6/8	0	5 7/8	0	7 1/8	0	8 3/8	0	9 3/8
12	0	3 6/8	0	5	0	6 2/8	0	7 4/8	0	8 6/8	0	10

SCANTLING.	4s. 6d.		5s.		5s. 6d.		6s.		6s. 6d.		7s.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
2 In. by 2	0	1 4/8	0	1 5/8	0	1 6/8	0	2	0	2 1/8	0	2 2/8
2 1/2	0	1 7/8	0	2	0	2 2/8	0	2 4/8	0	2 5/8	0	2 7/8
3	0	2 2/8	0	2 4/8	0	2 6/8	0	3	0	3 2/8	0	3 4/8
3 1/2	0	2 5/8	0	2 7/8	0	3 1/8	0	3 4/8	0	3 6/8	0	4
4	0	3	0	3 2/8	0	3 6/8	0	4	0	4 2/8	0	4 5/8
4 1/2	0	3 3/8	0	3 6/8	0	4 1/8	0	4 4/8	0	4 7/8	0	5 2/8
5	0	3 6/8	0	4 1/8	0	4 4/8	0	5	0	5 2/8	0	5 6/8
5 1/2	0	4 1/8	0	4 4/8	0	5	0	5 4/8	0	5 7/8	0	6 3/8
6	0	4 4/8	0	5	0	5 4/8	0	6	0	6 4/8	0	7
6 1/2	0	4 7/8	0	5 3/8	0	5 7/8	0	6 4/8	0	7	0	7 4/8
7	0	5 2/8	0	5 6/8	0	6 2/8	0	7	0	7 4/8	0	8 1/8
7 1/2	0	5 5/8	0	6 2/8	0	6 7/8	0	7 4/8	0	8 2/8	0	8 3/8
8	0	6	0	6 5/8	0	7 4/8	0	8	0	8 5/8	0	9 2/8
8 1/2	0	6 3/8	0	7	0	7 6/8	0	8 4/8	0	9 1/8	0	9 7/8
9	0	6 6/8	0	7 4/8	0	8 2/8	0	9	0	9 6/8	0	10 4/8
9 1/2	0	7 1/8	0	7 7/8	0	8 5/8	0	9 4/8	0	10 2/8	0	11
10	0	7 4/8	0	8 2/8	0	9 1/8	0	10	0	10 6/8	0	11 5/8
10 1/2	0	7 7/8	0	8 6/8	0	9 5/8	0	10 4/8	0	11 3/8	1	0 2/8
11	0	8 2/8	0	9 1/8	0	10	0	11	0	11 7/8	1	0 6/8
11 1/2	0	8 5/8	0	9 4/8	0	10 4/8	0	11 4/8	1	0 3/8	1	1 3/8
12	0	9	0	10	0	11	1	0	1	1	1	2
	s.	d.	s.	d.	s	d.	s.	d.	s.	d.	s.	d.
2 1/2 In. by 2 1/2	0	2 2/8	0	2 4/8	0	2 6/8	0	3 1/8	0	3 3/8	0	3 5/8
3	0	2 6/8	0	3 1/8	0	3 3/8	0	3 6/8	0	4	0	4 3/8
3 1/2	0	3 2/8	0	3 5/8	0	4	0	4 3/8	0	4 5/8	0	5
4	0	3 6/8	0	4 1/8	0	4 4/8	0	5	0	5 3/8	0	5 6/8
4 1/2	0	4 1/8	0	4 5/8	0	5 1/8	0	5 5/8	0	6	0	6 4/8
5	0	4 5/8	0	5 1/8	0	5 6/8	0	6 2/8	0	6 6/8	0	7 2/8
5 1/2	0	5 1/8	0	5 5/8	0	6 2/8	0	6 7/8	0	7 3/8	0	8
6	0	5 5/8	0	6 2/8	0	6 7/8	0	7 4/8	0	8 1/8	0	8 6/8
6 1/2	0	6	0	6 6/8	0	7 3/8	0	8 1/8	0	8 6/8	0	9 3/8
7	0	6 4/8	0	7 2/8	0	8	0	8 5/8	0	9 3/8	0	10 1/8
7 1/2	0	7	0	7 6/8	0	8 4/8	0	9 3/8	0	10 1/8	0	10 5/8
8	0	7 4/8	0	8 2/8	0	9 1/8	0	10	0	10 6/8	0	11 4/8
8 1/2	0	7 7/8	0	8 6/8	0	9 5/8	0	10 5/8	0	11 4/8	1	0 3/8
9	0	8 3/8	0	9 1/8	0	10 1/8	0	11 2/8	1	0 1/8	1	1 1/8
9 1/2	0	8 7/8	0	9 5/8	0	10 7/8	0	11 7/8	1	0 6/8	1	1 6/8
10	0	9 3/8	0	10 2/8	0	11 3/8	1	0 4/8	1	1 4/8	1	2 4/8
10 1/2	0	9 6/8	0	10 7/8	1	0	1	1 1/8	1	2 1/8	1	3 2/8
11	0	10 2/8	0	11 3/8	1	0 4/8	1	1 6/8	1	2 5/8	1	4
11 1/2	0	10 6/8	0	11 7/8	1	1 1/8	1	2 3/8	1	3 4/8	1	4 5/8
12	0	11 2/8	1	0 4/8	1	1 6/8	1	3	1	4 2/8	1	5 3/8

SCANTLING.	1s. 6d.		2s.		2s. 6d.		3s.		3s. 6d.		4s.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
3 In. by 3	0	$1\frac{1}{8}$	0	$1\frac{4}{8}$	0	$1\frac{7}{8}$	0	$2\frac{2}{8}$	0	$2\frac{5}{8}$	0	3
$3\frac{1}{2}$	0	$1\frac{3}{8}$	0	$1\frac{6}{8}$	0	$2\frac{1}{8}$	0	$2\frac{5}{8}$	0	3	0	$3\frac{4}{8}$
4	0	$1\frac{4}{8}$	0	2	0	$2\frac{4}{8}$	0	3	0	$3\frac{4}{8}$	0	4
$4\frac{1}{2}$	0	$1\frac{5}{8}$	0	$2\frac{2}{8}$	0	$2\frac{6}{8}$	0	$3\frac{3}{8}$	0	$3\frac{7}{8}$	0	$4\frac{4}{8}$
5	0	$1\frac{7}{8}$	0	$2\frac{4}{8}$	0	$3\frac{1}{8}$	0	$3\frac{6}{8}$	0	$4\frac{3}{8}$	0	5
$5\frac{1}{2}$	0	2	0	$2\frac{6}{8}$	0	$3\frac{3}{8}$	0	$4\frac{1}{8}$	0	$4\frac{6}{8}$	0	$5\frac{4}{8}$
6	0	$2\frac{2}{8}$	0	3	0	$3\frac{6}{8}$	0	$4\frac{4}{8}$	0	$5\frac{2}{8}$	0	6
$6\frac{1}{2}$	0	$2\frac{3}{8}$	0	$3\frac{2}{8}$	0	4	0	$4\frac{7}{8}$	0	$5\frac{5}{8}$	0	$6\frac{4}{8}$
7	0	$2\frac{5}{8}$	0	$3\frac{4}{8}$	0	$4\frac{3}{8}$	0	$5\frac{2}{8}$	0	$6\frac{1}{8}$	0	7
$7\frac{1}{2}$	0	$2\frac{6}{8}$	0	$3\frac{6}{8}$	0	$4\frac{6}{8}$	0	$5\frac{5}{8}$	0	$6\frac{4}{8}$	0	$7\frac{4}{8}$
8	0	3	0	4	0	5	0	6	0	7	0	8
$8\frac{1}{2}$	0	$3\frac{1}{8}$	0	$4\frac{2}{8}$	0	$5\frac{2}{8}$	0	$6\frac{3}{8}$	0	$7\frac{3}{8}$	0	$8\frac{4}{8}$
9	0	$3\frac{3}{8}$	0	$4\frac{4}{8}$	0	$5\frac{5}{8}$	0	$6\frac{6}{8}$	0	$7\frac{7}{8}$	0	9
$9\frac{1}{2}$	0	$3\frac{4}{8}$	0	$4\frac{6}{8}$	0	$5\frac{7}{8}$	0	$7\frac{1}{8}$	0	$8\frac{2}{8}$	0	$9\frac{4}{8}$
10	0	$3\frac{6}{8}$	0	5	0	$6\frac{2}{8}$	0	$7\frac{4}{8}$	0	$8\frac{6}{8}$	0	10
$10\frac{1}{2}$	0	$3\frac{7}{8}$	0	$5\frac{2}{8}$	0	$6\frac{4}{8}$	0	$7\frac{7}{8}$	0	$9\frac{1}{8}$	0	$10\frac{4}{8}$
11	0	$4\frac{1}{8}$	0	$5\frac{4}{8}$	0	$6\frac{7}{8}$	0	$8\frac{2}{8}$	0	$9\frac{5}{8}$	0	11
$11\frac{1}{2}$	0	$4\frac{2}{8}$	0	$5\frac{6}{8}$	0	$7\frac{1}{8}$	0	$8\frac{5}{8}$	0	10	0	$11\frac{4}{8}$
12	0	$4\frac{4}{8}$	0	6	0	$7\frac{4}{8}$	0	9	0	$10\frac{4}{8}$	0	12
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
$3\frac{1}{2}$ In. by $3\frac{1}{2}$	0	$1\frac{4}{8}$	0	2	0	$2\frac{4}{8}$	0	3	0	$3\frac{4}{8}$	0	4
4	0	$1\frac{6}{8}$	0	$2\frac{2}{8}$	0	$2\frac{7}{8}$	0	$3\frac{4}{8}$	0	4	0	$4\frac{5}{8}$
$4\frac{1}{2}$	0	$1\frac{8}{8}$	0	$2\frac{5}{8}$	0	$3\frac{2}{8}$	0	$3\frac{7}{8}$	0	$4\frac{4}{8}$	0	$5\frac{3}{8}$
5	0	$2\frac{1}{8}$	0	$2\frac{7}{8}$	0	$3\frac{5}{8}$	0	$4\frac{3}{8}$	0	5	0	$5\frac{6}{8}$
$5\frac{1}{2}$	0	$2\frac{3}{8}$	0	$3\frac{1}{8}$	0	4	0	$4\frac{6}{8}$	0	$5\frac{4}{8}$	0	$6\frac{3}{8}$
6	0	$2\frac{5}{8}$	0	$3\frac{4}{8}$	0	$4\frac{2}{8}$	0	$5\frac{2}{8}$	0	$6\frac{1}{8}$	0	7
$6\frac{1}{2}$	0	$2\frac{6}{8}$	0	$3\frac{6}{8}$	0	$4\frac{5}{8}$	0	$5\frac{5}{8}$	0	$6\frac{3}{8}$	0	$7\frac{4}{8}$
7	0	3	0	4	0	5	0	$6\frac{1}{8}$	0	$7\frac{1}{8}$	0	$8\frac{1}{8}$
$7\frac{1}{2}$	0	$3\frac{2}{8}$	0	$4\frac{3}{8}$	0	$5\frac{3}{8}$	0	$6\frac{4}{8}$	0	$7\frac{5}{8}$	0	$8\frac{8}{8}$
8	0	$3\frac{4}{8}$	0	$4\frac{5}{8}$	0	$5\frac{6}{8}$	0	7	0	$8\frac{1}{8}$	0	$9\frac{4}{8}$
$8\frac{1}{2}$	0	$3\frac{5}{8}$	0	$4\frac{7}{8}$	0	$6\frac{1}{8}$	0	$7\frac{3}{8}$	0	$8\frac{5}{8}$	0	$9\frac{7}{8}$
9	0	$3\frac{7}{8}$	0	$5\frac{2}{8}$	0	$6\frac{4}{8}$	0	$7\frac{7}{8}$	0	$9\frac{1}{8}$	0	$10\frac{4}{8}$
$9\frac{1}{2}$	0	$4\frac{1}{8}$	0	$5\frac{4}{8}$	0	$6\frac{7}{8}$	0	$8\frac{2}{8}$	0	$9\frac{5}{8}$	0	11
10	0	$4\frac{3}{8}$	0	$5\frac{6}{8}$	0	$7\frac{2}{8}$	0	$8\frac{6}{8}$	0	$10\frac{1}{8}$	0	$11\frac{5}{8}$
$10\frac{1}{2}$	0	$4\frac{4}{8}$	0	$6\frac{1}{8}$	0	$7\frac{5}{8}$	0	$9\frac{1}{8}$	0	$10\frac{5}{8}$	1	$0\frac{3}{8}$
11	0	$4\frac{6}{8}$	0	$6\frac{3}{8}$	0	8	0	$9\frac{5}{8}$	0	$11\frac{1}{8}$	1	$0\frac{6}{8}$
$11\frac{1}{2}$	0	5	0	$6\frac{5}{8}$	0	$8\frac{3}{8}$	0	10	0	$11\frac{5}{8}$	1	$1\frac{3}{8}$
12	0	$5\frac{2}{8}$	0	7	0	$8\frac{6}{8}$	0	$10\frac{4}{8}$	1	$0\frac{2}{8}$	1	2
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
4 In. by 4	0	2	0	$2\frac{5}{8}$	0	$3\frac{2}{8}$	0	4	0	$4\frac{5}{8}$	0	$5\frac{2}{8}$
$4\frac{1}{2}$	0	$2\frac{2}{8}$	0	3	0	$3\frac{6}{8}$	0	$4\frac{4}{8}$	0	$5\frac{2}{8}$	0	6
5	0	$2\frac{4}{8}$	0	$3\frac{2}{8}$	0	$4\frac{1}{8}$	0	5	0	$5\frac{6}{8}$	0	$6\frac{5}{8}$

SCANTLING.	4s. 6d.		5s.		5s. 6d.		6s.		6s. 6d.		7s.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
3 In. by 3	0	$3\frac{3}{8}$	0	$3\frac{6}{8}$	0	$4\frac{1}{8}$	0	$4\frac{4}{8}$	0	$4\frac{7}{8}$	0	$5\frac{2}{8}$
$3\frac{1}{2}$	0	$3\frac{7}{8}$	0	$4\frac{3}{8}$	0	$4\frac{6}{8}$	0	$5\frac{2}{8}$	0	$5\frac{5}{8}$	0	$6\frac{1}{8}$
4	0	$4\frac{4}{8}$	0	5	0	$5\frac{4}{8}$	0	6	0	$6\frac{4}{8}$	0	7
$4\frac{1}{2}$	0	5	0	$5\frac{5}{8}$	0	$6\frac{1}{8}$	0	$6\frac{6}{8}$	0	$7\frac{2}{8}$	0	$7\frac{7}{8}$
5	0	$5\frac{5}{8}$	0	$6\frac{2}{8}$	0	$6\frac{7}{8}$	0	$7\frac{4}{8}$	0	$8\frac{1}{8}$	0	$8\frac{6}{8}$
$5\frac{1}{2}$	0	$6\frac{1}{8}$	0	$6\frac{7}{8}$	0	$7\frac{4}{8}$	0	$8\frac{2}{8}$	0	$8\frac{7}{8}$	0	$9\frac{5}{8}$
6	0	$6\frac{6}{8}$	0	$7\frac{4}{8}$	0	$8\frac{2}{8}$	0	9	0	$9\frac{6}{8}$	0	$10\frac{4}{8}$
$6\frac{1}{2}$	0	$7\frac{2}{8}$	0	$8\frac{1}{8}$	0	$8\frac{7}{8}$	0	$9\frac{6}{8}$	0	$10\frac{4}{8}$	0	$11\frac{3}{8}$
7	0	$7\frac{7}{8}$	0	$8\frac{6}{8}$	0	$9\frac{5}{8}$	0	$10\frac{4}{8}$	0	$11\frac{2}{8}$	1	$0\frac{2}{8}$
$7\frac{1}{2}$	0	$8\frac{5}{8}$	0	$9\frac{3}{8}$	0	$10\frac{2}{8}$	0	$11\frac{2}{8}$	1	$0\frac{1}{8}$	1	$1\frac{1}{8}$
8	0	9	0	10	0	11	1	0	1	1	1	2
$8\frac{1}{2}$	0	$9\frac{4}{8}$	0	$10\frac{5}{8}$	0	$11\frac{5}{8}$	1	$0\frac{6}{8}$	1	$1\frac{6}{8}$	1	$2\frac{7}{8}$
9	0	$10\frac{1}{8}$	0	$11\frac{2}{8}$	1	$0\frac{3}{8}$	1	$1\frac{4}{8}$	1	$2\frac{5}{8}$	1	$3\frac{6}{8}$
$9\frac{1}{2}$	0	$10\frac{8}{8}$	0	$11\frac{7}{8}$	1	1	1	$2\frac{2}{8}$	1	$3\frac{3}{8}$	1	$4\frac{5}{8}$
10	0	$11\frac{2}{8}$	1	$0\frac{4}{8}$	1	$1\frac{6}{8}$	1	3	1	$4\frac{2}{8}$	1	$5\frac{4}{8}$
$10\frac{1}{2}$	0	$11\frac{8}{8}$	1	$1\frac{1}{8}$	1	$2\frac{3}{8}$	1	$3\frac{6}{8}$	1	5	1	$6\frac{3}{8}$
11	1	$0\frac{5}{8}$	1	$1\frac{6}{8}$	1	$3\frac{1}{8}$	1	$4\frac{4}{8}$	1	$5\frac{7}{8}$	1	$7\frac{2}{8}$
$11\frac{1}{2}$	1	$0\frac{5}{8}$	1	$2\frac{3}{8}$	1	$3\frac{6}{8}$	1	$5\frac{2}{8}$	1	$6\frac{8}{8}$	1	$8\frac{1}{8}$
12	1	$1\frac{4}{8}$	1	3	1	$4\frac{4}{8}$	1	6	1	$7\frac{4}{8}$	1	9
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
$3\frac{1}{2}$ In. by $3\frac{1}{2}$	0	$4\frac{4}{8}$	0	5	0	$5\frac{4}{8}$	0	$6\frac{1}{8}$	0	$6\frac{5}{8}$	0	$7\frac{1}{8}$
4	0	$5\frac{2}{8}$	0	$5\frac{6}{8}$	0	$6\frac{3}{8}$	0	7	0	$7\frac{4}{8}$	0	$8\frac{1}{8}$
$4\frac{1}{2}$	0	$5\frac{7}{8}$	0	$6\frac{4}{8}$	0	$7\frac{1}{8}$	0	$7\frac{7}{8}$	0	$8\frac{4}{8}$	0	$9\frac{1}{8}$
5	0	$6\frac{4}{8}$	0	$7\frac{2}{8}$	0	8	0	$8\frac{6}{8}$	0	$9\frac{3}{8}$	0	$10\frac{1}{8}$
$5\frac{1}{2}$	0	$7\frac{1}{8}$	0	8	0	$8\frac{6}{8}$	0	$9\frac{5}{8}$	0	$10\frac{3}{8}$	0	$11\frac{2}{8}$
6	0	$7\frac{7}{8}$	0	$8\frac{6}{8}$	0	$9\frac{5}{8}$	0	$10\frac{4}{8}$	0	$11\frac{3}{8}$	1	$0\frac{3}{8}$
$6\frac{1}{2}$	0	$8\frac{4}{8}$	0	$9\frac{3}{8}$	0	$10\frac{2}{8}$	0	$11\frac{3}{8}$	1	$0\frac{2}{8}$	1	$1\frac{4}{8}$
7	0	$9\frac{1}{8}$	0	$10\frac{1}{8}$	0	$11\frac{1}{8}$	1	$0\frac{2}{8}$	1	$1\frac{2}{8}$	1	$2\frac{5}{8}$
$7\frac{1}{2}$	0	$9\frac{8}{8}$	0	$10\frac{7}{8}$	1	0	1	$1\frac{1}{8}$	1	$2\frac{1}{8}$	1	$3\frac{2}{8}$
8	0	$10\frac{4}{8}$	0	$11\frac{5}{8}$	1	$0\frac{6}{8}$	1	2	1	$3\frac{1}{8}$	1	$4\frac{3}{8}$
$8\frac{1}{2}$	0	$11\frac{1}{8}$	1	$0\frac{3}{8}$	1	$1\frac{5}{8}$	1	$2\frac{7}{8}$	1	4	1	$5\frac{2}{8}$
9	0	$11\frac{6}{8}$	1	$1\frac{1}{8}$	1	$2\frac{3}{8}$	1	$3\frac{6}{8}$	1	5	1	$6\frac{3}{8}$
$9\frac{1}{2}$	1	$0\frac{3}{8}$	1	$1\frac{8}{8}$	1	$3\frac{1}{8}$	1	$4\frac{5}{8}$	1	6	1	$7\frac{3}{8}$
10	1	$1\frac{1}{8}$	1	$2\frac{4}{8}$	1	4	1	$5\frac{4}{8}$	1	$6\frac{7}{8}$	1	$8\frac{3}{8}$
$10\frac{1}{2}$	1	$1\frac{9}{8}$	1	$3\frac{2}{8}$	1	$4\frac{6}{8}$	1	$6\frac{3}{8}$	1	$7\frac{8}{8}$	1	$9\frac{3}{8}$
11	1	$2\frac{3}{8}$	1	4	1	$5\frac{5}{8}$	1	$7\frac{2}{8}$	1	$8\frac{6}{8}$	1	$10\frac{3}{8}$
$11\frac{1}{2}$	1	3	1	$4\frac{6}{8}$	1	$6\frac{3}{8}$	1	$8\frac{1}{8}$	1	$9\frac{6}{8}$	1	$11\frac{3}{8}$
12	1	$3\frac{6}{8}$	1	$5\frac{4}{8}$	1	$7\frac{2}{8}$	1	9	1	$10\frac{6}{8}$	2	$0\frac{4}{8}$
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
4 In. by 4	0	6	0	$6\frac{5}{8}$	0	$7\frac{2}{8}$	0	8	0	$8\frac{5}{8}$	0	$9\frac{2}{8}$
$4\frac{1}{2}$	0	$6\frac{6}{8}$	0	$7\frac{4}{8}$	0	$8\frac{2}{8}$	0	9	0	$9\frac{6}{8}$	0	$10\frac{4}{8}$
5	0	$7\frac{4}{8}$	0	$8\frac{2}{8}$	0	$9\frac{1}{8}$	0	10	0	$10\frac{6}{8}$	0	$11\frac{3}{8}$

SCANTLING.	1s. 6d.	2s.	2s. 6d.	3s.	3s. 6d.	4s.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
4 In. by $5\frac{1}{2}$	0 $2\frac{6}{8}$	0 $3\frac{5}{8}$	0 $4\frac{4}{8}$	0 $5\frac{4}{8}$	0 $6\frac{3}{8}$	0 $7\frac{2}{8}$
... 6	0 3	0 4	0 5	0 6	0 7	0 8
... $6\frac{1}{2}$	0 $3\frac{2}{8}$	0 $4\frac{2}{8}$	0 $5\frac{3}{8}$	0 $6\frac{4}{8}$	0 $7\frac{4}{8}$	0 $8\frac{5}{8}$
... 7	0 $3\frac{4}{8}$	0 $4\frac{5}{8}$	0 $5\frac{6}{8}$	0 7	0 $8\frac{1}{8}$	0 $9\frac{2}{8}$
... $7\frac{1}{2}$	0 $3\frac{6}{8}$	0 5	0 $6\frac{2}{8}$	0 $7\frac{4}{8}$	0 $8\frac{6}{8}$	0 10
... 8	0 4	0 $5\frac{2}{8}$	0 $6\frac{5}{8}$	0 8	0 $9\frac{2}{8}$	0 $10\frac{5}{8}$
... $8\frac{1}{2}$	0 $4\frac{2}{8}$	0 $5\frac{5}{8}$	0 7	0 $8\frac{4}{8}$	0 $9\frac{7}{8}$	0 $11\frac{2}{8}$
... 9	0 $4\frac{4}{8}$	0 6	0 $7\frac{2}{8}$	0 9	0 $10\frac{4}{8}$	1 0
... $9\frac{1}{2}$	0 $4\frac{6}{8}$	0 $6\frac{2}{8}$	0 $7\frac{7}{8}$	0 $9\frac{4}{8}$	0 11	1 $0\frac{5}{8}$
... 10	0 5	0 $6\frac{5}{8}$	0 $8\frac{2}{8}$	0 10	0 $11\frac{5}{8}$	1 $1\frac{2}{8}$
... $10\frac{1}{2}$	0 $5\frac{2}{8}$	0 7	0 $8\frac{6}{8}$	0 $10\frac{4}{8}$	1 $0\frac{2}{8}$	1 2
... 11	0 $5\frac{4}{8}$	0 $7\frac{2}{8}$	0 $9\frac{1}{8}$	0 11	1 $0\frac{6}{8}$	1 $2\frac{5}{8}$
... $11\frac{1}{2}$	0 $5\frac{6}{8}$	0 $7\frac{5}{8}$	0 $9\frac{4}{8}$	0 $11\frac{4}{8}$	1 $1\frac{3}{8}$	1 $3\frac{2}{8}$
... 12	0 6	0 8	0 10	1 0	1 2	1 4
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
$4\frac{1}{2}$ In. by $4\frac{1}{2}$	0 $2\frac{4}{8}$	0 $3\frac{3}{8}$	0 $4\frac{1}{8}$	0 5	0 $5\frac{7}{8}$	0 $6\frac{6}{8}$
... 5	0 $2\frac{6}{8}$	0 $3\frac{6}{8}$	0 $4\frac{2}{8}$	0 $5\frac{3}{8}$	0 $6\frac{4}{8}$	0 $7\frac{2}{8}$
... $5\frac{1}{2}$	0 3	0 $4\frac{1}{8}$	0 $5\frac{1}{8}$	0 $6\frac{1}{8}$	0 $7\frac{1}{8}$	0 $8\frac{2}{8}$
... 6	0 $3\frac{2}{8}$	0 $4\frac{4}{8}$	0 $5\frac{2}{8}$	0 $6\frac{6}{8}$	0 $7\frac{7}{8}$	0 9
... $6\frac{1}{2}$	0 $3\frac{5}{8}$	0 $4\frac{7}{8}$	0 6	0 $7\frac{2}{8}$	0 $8\frac{4}{8}$	0 $9\frac{3}{8}$
... 7	0 $3\frac{7}{8}$	0 $5\frac{2}{8}$	0 $6\frac{4}{8}$	0 $7\frac{7}{8}$	0 $9\frac{1}{8}$	0 $10\frac{4}{8}$
... $7\frac{1}{2}$	0 $4\frac{1}{8}$	0 $5\frac{5}{8}$	0 7	0 $8\frac{3}{8}$	0 $9\frac{6}{8}$	0 $11\frac{5}{8}$
... 8	0 $4\frac{4}{8}$	0 6	0 $7\frac{4}{8}$	0 9	0 $10\frac{4}{8}$	1 0
... $8\frac{1}{2}$	0 $4\frac{6}{8}$	0 $6\frac{3}{8}$	0 $7\frac{7}{8}$	0 $9\frac{4}{8}$	0 $11\frac{1}{8}$	1 $0\frac{6}{8}$
... 9	0 5	0 $6\frac{6}{8}$	0 $8\frac{3}{8}$	0 $10\frac{1}{8}$	0 $11\frac{6}{8}$	1 $1\frac{4}{8}$
... $9\frac{1}{2}$	0 $5\frac{2}{8}$	0 $7\frac{1}{8}$	0 $8\frac{7}{8}$	0 $10\frac{6}{8}$	1 $0\frac{3}{8}$	1 $2\frac{2}{8}$
... 10	0 $5\frac{5}{8}$	0 $7\frac{4}{8}$	0 $9\frac{2}{8}$	0 $11\frac{2}{8}$	1 $1\frac{1}{8}$	1 3
... $10\frac{1}{2}$	0 $5\frac{7}{8}$	0 $7\frac{7}{8}$	0 $9\frac{6}{8}$	0 $11\frac{6}{8}$	1 $1\frac{6}{8}$	1 $3\frac{6}{8}$
... 11	0 $6\frac{1}{8}$	0 $8\frac{2}{8}$	0 $10\frac{2}{8}$	1 $0\frac{3}{8}$	1 $2\frac{3}{8}$	1 $4\frac{4}{8}$
... $11\frac{1}{2}$	0 $6\frac{3}{8}$	0 $8\frac{5}{8}$	0 $10\frac{6}{8}$	1 $0\frac{7}{8}$	1 3	1 $5\frac{2}{8}$
... 12	0 $6\frac{6}{8}$	0 9	0 $11\frac{2}{8}$	1 $1\frac{4}{8}$	1 $3\frac{6}{8}$	1 6
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
5 In. by 5	0 $3\frac{1}{8}$	0 $4\frac{1}{8}$	0 $5\frac{1}{8}$	0 $6\frac{2}{8}$	0 $7\frac{3}{8}$	0 $8\frac{3}{8}$
... $5\frac{1}{2}$	0 $3\frac{3}{8}$	0 $4\frac{4}{8}$	0 $5\frac{5}{8}$	0 $6\frac{7}{8}$	0 $7\frac{7}{8}$	0 $9\frac{1}{8}$
... 6	0 $3\frac{6}{8}$	0 5	0 $6\frac{2}{8}$	0 $7\frac{4}{8}$	0 $8\frac{6}{8}$	0 10
... $6\frac{1}{2}$	0 4	0 $5\frac{3}{8}$	0 $6\frac{6}{8}$	0 $8\frac{1}{8}$	0 $9\frac{3}{8}$	0 $10\frac{6}{8}$
... 7	0 $4\frac{3}{8}$	0 $5\frac{6}{8}$	0 $7\frac{2}{8}$	0 $8\frac{6}{8}$	0 $10\frac{1}{8}$	0 $11\frac{5}{8}$
... $7\frac{1}{2}$	0 $4\frac{5}{8}$	0 $6\frac{2}{8}$	0 $7\frac{6}{8}$	0 $9\frac{3}{8}$	0 $10\frac{7}{8}$	1 $0\frac{4}{8}$
... 8	0 5	0 $6\frac{5}{8}$	0 $8\frac{2}{8}$	0 10	0 $11\frac{5}{8}$	1 $1\frac{3}{8}$
... $8\frac{1}{2}$	0 $5\frac{2}{8}$	0 7	0 $8\frac{6}{8}$	0 $10\frac{5}{8}$	1 $0\frac{3}{8}$	1 $2\frac{1}{8}$
... 9	0 $5\frac{5}{8}$	0 $7\frac{4}{8}$	0 $9\frac{3}{8}$	0 $11\frac{2}{8}$	1 $1\frac{1}{8}$	1 3
... $9\frac{1}{2}$	0 $5\frac{7}{8}$	0 $7\frac{7}{8}$	0 $9\frac{7}{8}$	0 $11\frac{7}{8}$	1 $1\frac{6}{8}$	1 $3\frac{6}{8}$

SCANTLING.	4s. 6d.		5s.		5s. 6d.		6s.		6s. 6d.		7s.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
4 In. by 5½	0	8⅜	0	9⅛	0	10	0	11	0	11⅞	1	0⅝
... 6	0	9	0	10	0	11	1	0	1	1	1	2
... 6½	0	9⅝	0	10⅝	0	11⅞	1	1	1	2	1	3⅛
... 7	0	10⅜	0	11⅝	1	0⅝	1	2	1	3⅛	1	4⅜
... 7½	0	11⅛	1	0⅜	1	1⅝	1	3	1	4⅜	1	5⅝
... 8	1	0	1	1⅜	1	2⅝	1	4	1	5⅜	1	6⅝
... 8½	1	0⅝	1	2⅛	1	3⅜	1	5	1	6⅜	1	7⅝
... 9	1	1⅜	1	3	1	4⅜	1	6	1	7⅜	1	9
... 9½	1	2⅛	1	3⅝	1	5⅜	1	7	1	8⅜	1	10⅛
... 10	1	3	1	4⅝	1	6⅛	1	8	1	9⅝	1	11⅛
... 10½	1	3⅝	1	5⅜	1	7⅛	1	9	1	10⅝	2	0⅜
... 11	1	4⅜	1	6⅛	1	8⅛	1	10	1	11⅝	2	1⅝
... 11½	1	5⅛	1	7⅛	1	9	1	11	2	0⅞	2	2⅝
... 12	1	6	1	8	1	10	2	0	2	2	2	4
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
4½ In. by 4½	0	7⅜	0	8⅜	0	9⅛	0	10⅛	0	10⅞	0	11⅝
... 5	0	8⅛	0	9⅛	0	10⅛	0	11⅛	1	0⅛	1	1⅛
... 5½	0	9⅛	0	10⅛	0	11⅛	1	0⅛	1	1⅛	1	2⅛
... 6	0	10⅛	0	11⅛	1	0⅛	1	1⅜	1	2⅛	1	3⅛
... 6½	0	10⅞	1	0⅛	1	1⅛	1	2⅝	1	3⅛	1	5
... 7	0	11⅝	1	1⅛	1	2⅛	1	3⅝	1	5	1	6⅛
... 7½	1	0	1	2	1	3⅛	1	4⅞	1	6⅛	1	7⅝
... 8	1	1⅜	1	3	1	4⅜	1	6	1	7⅜	1	9
... 8½	1	2⅜	1	3⅞	1	5⅜	1	7⅛	1	8⅝	1	10⅛
... 9	1	3⅛	1	4⅝	1	6⅜	1	8⅛	1	9⅝	1	11⅝
... 9½	1	4	1	5⅝	1	7⅜	1	9⅜	1	11⅜	2	0⅛
... 10	1	4⅞	1	6⅝	1	8⅝	1	10⅜	2	0⅛	2	2⅛
... 10½	1	5⅝	1	7⅝	1	9⅝	1	11⅝	2	1⅜	2	3⅜
... 11	1	6⅜	1	8⅝	1	10⅝	2	0⅝	2	2⅛	2	4⅝
... 11½	1	7⅛	1	9⅜	1	11⅝	2	1⅞	2	4	2	6⅛
... 12	1	8⅜	1	10⅜	2	0⅝	2	3	2	5⅜	2	7⅜
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
5 In. by 5	0	9⅜	0	10⅜	0	11⅜	1	0⅝	1	1⅜	1	2⅝
... 5½	0	10⅛	0	11⅜	1	0⅝	1	1⅝	1	2⅛	1	3⅝
... 6	0	11⅛	1	0⅜	1	1⅝	1	3	1	4⅛	1	5⅝
... 6½	1	0⅛	1	1⅜	1	2⅞	1	4⅛	1	5⅜	1	6⅞
... 7	1	1⅛	1	2⅜	1	4	1	5⅜	1	6⅞	1	8⅜
... 7½	1	2	1	3⅝	1	5⅛	1	6⅝	1	8⅝	1	9⅞
... 8	1	3	1	4⅝	1	6⅛	1	8	1	9⅝	1	11⅛
... 8½	1	3⅞	1	5⅝	1	7⅜	1	9⅛	1	11	2	0⅝
... 9	1	4⅞	1	6⅝	1	8⅝	1	10⅛	2	0⅜	2	2⅝
... 9½	1	5⅝	1	7⅝	1	9⅝	1	11⅝	2	1⅝	2	3⅝

SCANTLING.	1s. 6d.	2s.	2s. 6d.	3s.	3s. 6d.	4s.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
5 In. by 10	0 6 2/3	0 8 2/3	0 10 5/8	1 0	1 1 1/3	1 2 2/3
... 10½	0 6 7/8	0 8 7/8	0 10 7/8	1 1 1/8	1 3 2/8	1 5 4/8
... 11	0 7 1/8	0 9 1/8	0 11 3/8	1 1 2/8	1 4	1 6 2/3
... 11½	0 7 1/8	0 9 1/8	0 11 7/8	1 2 2/8	1 4 3/8	1 7 1/8
... 12	0 7 5/8	0 10	1 0 4/8	1 3	1 5 4/8	1 8
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
5½ In. by 5½	0 3 6/8	0 5	0 6 2/8	0 7 4/8	0 8 6/8	0 10
... 6	0 4 1/8	0 5 4/8	0 6 7/8	0 8 2/8	0 9 5/8	0 11
... 6½	0 4 3/8	0 5 7/8	0 7 3/8	0 8 7/8	0 10 3/8	0 11 7/8
... 7	0 4 6/8	0 6 3/8	0 8	0 9 5/8	0 11 1/8	1 0 6/8
... 7½	0 5 1/8	0 6 7/8	0 8 4/8	0 10 2/8	1 0	1 1 6/8
... 8	0 5 4/8	0 7 3/8	0 9 1/8	0 11	1 0 6/8	1 2 5/8
... 8½	0 5 6/8	0 7 6/8	0 9 5/8	0 11 5/8	1 1 1/8	1 3 4/8
... 9	0 6 1/8	0 8 2/8	0 10 2/8	1 0 3/8	1 2 3/8	1 4 4/8
... 9½	0 6 4/8	0 8 5/8	0 10 5/8	1 1	1 3 1/8	1 5 3/8
... 10	0 6 7/8	0 9 1/8	0 11 3/8	1 1 6/8	1 4	1 6 2/3
... 10½	0 7 1/8	0 9 5/8	1 0	1 2 2/8	1 4 6/8	1 7 2/3
... 11	0 7 4/8	0 10	1 0 4/8	1 3 1/8	1 5 5/8	1 8 1/8
... 11½	0 7 7/8	0 10 4/8	1 1 1/8	1 3 6/8	1 6 2/8	1 9
... 12	0 8 2/8	0 11	1 1 6/8	1 4 4/8	1 7 2/8	1 10
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
6 In. by 6	0 4 4/8	0 6	0 7 4/8	0 9	0 10 4/8	1 0
... 6½	0 4 7/8	0 6 4/8	0 8 1/8	0 9 6/8	0 11 3/8	1 1
... 7	0 5 2/8	0 7	0 8 6/8	0 10 4/8	1 0 2/8	1 2
... 7½	0 5 5/8	0 7 4/8	0 9 2/8	0 11 2/8	1 1 1/8	1 3
... 8	0 6	0 8	0 10	1 0	1 2	1 4
... 8½	0 6 3/8	0 8 4/8	0 10 5/8	1 0 6/8	1 2 7/8	1 5
... 9	0 6 6/8	0 9	0 11 2/8	1 1 4/8	1 3 5/8	1 6
... 9½	0 7 1/8	0 9 4/8	0 11 7/8	1 2 2/8	1 4 5/8	1 7
... 10	0 7 4/8	0 10	1 0 4/8	1 3	1 5 4/8	1 8
... 10½	0 7 7/8	0 10 4/8	1 1 1/8	1 3 6/8	1 6 2/8	1 9
... 11	0 8 2/8	0 11	1 1 6/8	1 4 4/8	1 7 2/8	1 10
... 11½	0 8 5/8	0 11 4/8	1 2 2/8	1 5 2/8	1 8 1/8	1 11
... 12	0 9	1 0	1 3	1 6	1 9	2 0
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
6½ In. by 6½	0 5 2/8	0 7	0 8 6/8	0 10 4/8	1 0 2/8	1 2
... 7	0 5 5/8	0 7 4/8	0 9 2/8	0 11 2/8	1 1 2/8	1 3 1/8
... 7½	0 6	0 8 1/8	0 10 1/8	1 0 1/8	1 2 1/8	1 4 2/8
... 8	0 6 4/8	0 8 5/8	0 10 6/8	1 1	1 3 1/8	1 5 2/3
... 8½	0 6 7/8	0 9 1/8	0 11 4/8	1 1 6/8	1 4	1 6 3/8
... 9	0 7 2/8	0 9 6/8	1 0 1/8	1 2 2/8	1 5	1 7 1/3

SCANTLING.	4s. 6d.		5s.		5s. 6d.		6s.		6s. 6d.		7s.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
5 In. by 10	1	$6\frac{6}{8}$	1	$8\frac{3}{8}$	1	$10\frac{7}{8}$	2	1	2	3	2	$5\frac{1}{8}$
... $10\frac{1}{2}$	1	$7\frac{5}{8}$	1	$9\frac{7}{8}$	2	0	2	$2\frac{2}{8}$	2	$4\frac{3}{8}$	2	$6\frac{3}{8}$
... 11	1	$8\frac{5}{8}$	1	$10\frac{7}{8}$	2	$1\frac{1}{8}$	2	$3\frac{4}{8}$	2	$5\frac{6}{8}$	2	8
... $11\frac{1}{2}$	1	$9\frac{4}{8}$	1	$11\frac{7}{8}$	2	$2\frac{3}{8}$	2	$4\frac{6}{8}$	2	$7\frac{1}{8}$	2	$9\frac{4}{8}$
... 12	1	$10\frac{4}{8}$	2	1	2	$3\frac{4}{8}$	2	6	2	$8\frac{4}{8}$	2	11
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
$5\frac{1}{2}$ In. by $5\frac{1}{2}$	0	$11\frac{2}{8}$	1	$0\frac{4}{8}$	1	$1\frac{6}{8}$	1	$3\frac{1}{8}$	1	$4\frac{3}{8}$	1	$5\frac{5}{8}$
... 6	1	$0\frac{3}{8}$	1	$1\frac{6}{8}$	1	$3\frac{1}{8}$	1	$4\frac{4}{8}$	1	$5\frac{6}{8}$	1	$7\frac{4}{8}$
... $6\frac{1}{2}$	1	$1\frac{3}{8}$	1	$2\frac{7}{8}$	1	$4\frac{5}{8}$	1	$5\frac{7}{8}$	1	$7\frac{2}{8}$	1	$8\frac{6}{8}$
... 7	1	$2\frac{3}{8}$	1	4	1	$5\frac{5}{8}$	1	$7\frac{2}{8}$	1	$8\frac{6}{8}$	1	$10\frac{3}{8}$
... $7\frac{1}{2}$	1	$3\frac{3}{8}$	1	$5\frac{1}{8}$	1	$6\frac{7}{8}$	1	$8\frac{5}{8}$	1	$10\frac{2}{8}$	2	0
... 8	1	$4\frac{4}{8}$	1	$6\frac{2}{8}$	1	$8\frac{1}{8}$	1	10	1	$11\frac{6}{8}$	2	$1\frac{5}{8}$
... $8\frac{1}{2}$	1	$5\frac{4}{8}$	1	$7\frac{3}{8}$	1	$9\frac{3}{8}$	1	$11\frac{3}{8}$	2	$1\frac{2}{8}$	2	$3\frac{2}{8}$
... 9	1	$6\frac{4}{8}$	1	$8\frac{3}{8}$	1	$10\frac{3}{8}$	2	$0\frac{6}{8}$	2	$2\frac{6}{8}$	2	$4\frac{7}{8}$
... $9\frac{1}{2}$	1	$7\frac{4}{8}$	1	$9\frac{6}{8}$	1	$11\frac{7}{8}$	2	$2\frac{1}{8}$	2	$4\frac{3}{8}$	2	$6\frac{5}{8}$
... 10	1	$8\frac{5}{8}$	1	$10\frac{7}{8}$	2	$1\frac{1}{8}$	2	$3\frac{4}{8}$	2	$5\frac{6}{8}$	2	8
... $10\frac{1}{2}$	1	$9\frac{5}{8}$	2	0	2	$2\frac{3}{8}$	2	$4\frac{7}{8}$	2	$7\frac{2}{8}$	2	$9\frac{5}{8}$
... 11	1	$10\frac{5}{8}$	2	$1\frac{1}{8}$	2	$3\frac{3}{8}$	2	$6\frac{2}{8}$	2	$8\frac{6}{8}$	2	$11\frac{2}{8}$
... $11\frac{1}{2}$	1	$11\frac{5}{8}$	2	$2\frac{2}{8}$	2	$4\frac{1}{8}$	2	$7\frac{5}{8}$	2	$10\frac{2}{8}$	3	$0\frac{7}{8}$
... 12	2	$0\frac{6}{8}$	2	$3\frac{4}{8}$	2	$6\frac{2}{8}$	2	9	2	$11\frac{6}{8}$	3	$2\frac{4}{8}$
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
6 In. by 6	1	$1\frac{4}{8}$	1	3	1	$4\frac{4}{8}$	1	6	1	$7\frac{4}{8}$	1	9
... $6\frac{1}{2}$	1	$2\frac{5}{8}$	1	$4\frac{2}{8}$	1	$5\frac{7}{8}$	1	$7\frac{4}{8}$	1	$9\frac{1}{8}$	1	$10\frac{6}{8}$
... 7	1	$3\frac{6}{8}$	1	$5\frac{4}{8}$	1	$7\frac{2}{8}$	1	9	1	$10\frac{6}{8}$	2	$0\frac{4}{8}$
... $7\frac{1}{2}$	1	$4\frac{7}{8}$	1	$6\frac{6}{8}$	1	$8\frac{5}{8}$	1	$10\frac{4}{8}$	2	0	2	$2\frac{2}{8}$
... 8	1	6	1	8	1	10	2	0	2	2	2	4
... $8\frac{1}{2}$	1	$7\frac{1}{8}$	1	$9\frac{2}{8}$	1	$11\frac{3}{8}$	2	$1\frac{4}{8}$	2	$3\frac{5}{8}$	2	$5\frac{6}{8}$
... 9	1	$8\frac{2}{8}$	1	$10\frac{4}{8}$	2	0	2	3	2	$5\frac{2}{8}$	2	$7\frac{1}{8}$
... $9\frac{1}{2}$	1	$9\frac{3}{8}$	1	$11\frac{6}{8}$	2	$1\frac{1}{8}$	2	$4\frac{4}{8}$	2	$6\frac{7}{8}$	2	$9\frac{2}{8}$
... 10	1	$10\frac{4}{8}$	2	1	2	$3\frac{4}{8}$	2	6	2	$8\frac{4}{8}$	2	11
... $10\frac{1}{2}$	1	$11\frac{5}{8}$	2	$2\frac{2}{8}$	2	$4\frac{7}{8}$	2	$7\frac{4}{8}$	2	$10\frac{1}{8}$	3	$0\frac{6}{8}$
... 11	2	$0\frac{6}{8}$	2	$3\frac{4}{8}$	2	$6\frac{2}{8}$	2	9	2	$11\frac{6}{8}$	3	$2\frac{4}{8}$
... $11\frac{1}{2}$	2	$1\frac{7}{8}$	2	$4\frac{6}{8}$	2	$7\frac{5}{8}$	2	$10\frac{4}{8}$	3	$1\frac{3}{8}$	3	$4\frac{2}{8}$
... 12	2	3	2	6	2	9	3	0	3	3	3	6
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d	s	d.
$6\frac{1}{2}$ In. by $6\frac{1}{2}$	1	$3\frac{6}{8}$	1	$5\frac{4}{8}$	1	$7\frac{3}{8}$	1	$9\frac{1}{8}$	1	$10\frac{7}{8}$	2	$0\frac{5}{8}$
... 7	1	5	1	$6\frac{7}{8}$	1	$8\frac{6}{8}$	1	$10\frac{6}{8}$	2	$0\frac{5}{8}$	2	$2\frac{4}{8}$
... $7\frac{1}{2}$	1	$6\frac{2}{8}$	1	$8\frac{3}{8}$	1	$10\frac{3}{8}$	2	$0\frac{2}{8}$	2	$2\frac{2}{8}$	2	$4\frac{3}{8}$
... 8	1	$7\frac{4}{8}$	1	$9\frac{5}{8}$	1	$11\frac{6}{8}$	2	2	2	$4\frac{1}{8}$	2	$6\frac{2}{8}$
... $8\frac{1}{2}$	1	$8\frac{5}{8}$	1	11	2	$1\frac{2}{8}$	2	$3\frac{5}{8}$	2	$5\frac{7}{8}$	2	$8\frac{1}{8}$
... 9	1	$9\frac{7}{8}$	2	$0\frac{2}{8}$	2	$2\frac{6}{8}$	2	$5\frac{2}{8}$	2	$7\frac{5}{8}$	2	$10\frac{1}{8}$

SCANTLING.	1s. 6d.		2s.		2s. 6d.		3s.		3s. 6d.		4s.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
6½ In. by 9½	0	$7\frac{5}{8}$	0	$10\frac{3}{4}$	1	$0\frac{6}{8}$	1	$3\frac{3}{8}$	1	6	1	$8\frac{4}{8}$
... 10	0	$8\frac{1}{8}$	0	$10\frac{6}{8}$	1	$1\frac{4}{8}$	1	$4\frac{2}{8}$	1	$6\frac{7}{8}$	1	$9\frac{5}{8}$
... 10½	0	$8\frac{4}{8}$	0	$11\frac{3}{8}$	1	$2\frac{1}{8}$	1	5	1	$7\frac{1}{8}$	1	$10\frac{6}{8}$
... 11	0	$8\frac{7}{8}$	0	$11\frac{7}{8}$	1	$2\frac{7}{8}$	1	$5\frac{7}{8}$	1	$8\frac{6}{8}$	1	$11\frac{3}{8}$
... 11½	0	$9\frac{2}{8}$	1	0	1	$3\frac{4}{8}$	1	$6\frac{3}{8}$	1	$9\frac{6}{8}$	2	$0\frac{1}{8}$
... 12	0	$9\frac{6}{8}$	1	1	1	$4\frac{2}{8}$	1	$7\frac{4}{8}$	1	$10\frac{6}{8}$	2	2
	s.	d.	s.	d	s.	d.	s.	d.	s.	d.	s.	d.
7 In. by 7	0	$6\frac{1}{8}$	0	$8\frac{1}{8}$	0	$10\frac{1}{8}$	1	$0\frac{2}{8}$	1	$2\frac{2}{8}$	1	$4\frac{2}{8}$
... 7½	0	$6\frac{4}{8}$	0	$8\frac{5}{8}$	0	$10\frac{7}{8}$	1	$1\frac{3}{8}$	1	$3\frac{2}{8}$	1	$5\frac{4}{8}$
... 8	0	7	0	$9\frac{2}{8}$	0	$11\frac{5}{8}$	1	2	1	$4\frac{2}{8}$	1	$6\frac{5}{8}$
... 8½	0	$7\frac{3}{8}$	0	$9\frac{7}{8}$	1	$0\frac{3}{8}$	1	$2\frac{7}{8}$	1	$5\frac{2}{8}$	1	$7\frac{6}{8}$
... 9	0	$7\frac{7}{8}$	0	$10\frac{4}{8}$	1	$1\frac{1}{8}$	1	$3\frac{6}{8}$	1	$6\frac{3}{8}$	1	9
... 9½	0	$8\frac{2}{8}$	0	11	1	$1\frac{6}{8}$	1	$4\frac{3}{8}$	1	$7\frac{2}{8}$	1	$10\frac{1}{8}$
... 10	0	$8\frac{6}{8}$	0	$11\frac{5}{8}$	1	$2\frac{4}{8}$	1	$5\frac{4}{8}$	1	$8\frac{3}{8}$	1	$11\frac{2}{8}$
... 10½	0	$9\frac{1}{8}$	1	$0\frac{2}{8}$	1	$3\frac{2}{8}$	1	$6\frac{3}{8}$	1	$9\frac{2}{8}$	2	$0\frac{4}{8}$
... 11	0	$9\frac{5}{8}$	1	$0\frac{7}{8}$	1	4	1	$7\frac{2}{8}$	1	$10\frac{2}{8}$	2	$1\frac{6}{8}$
... 11½	0	10	1	$1\frac{3}{8}$	1	$4\frac{6}{8}$	1	$8\frac{1}{8}$	1	$11\frac{3}{8}$	2	$2\frac{6}{8}$
... 12	0	$10\frac{4}{8}$	1	2	1	$5\frac{4}{8}$	1	9	2	$0\frac{4}{8}$	2	4
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
7½ In. by 7½	0	7	0	$9\frac{3}{8}$	0	$11\frac{5}{8}$	1	2	1	$4\frac{3}{8}$	1	$6\frac{3}{8}$
... 8	0	$7\frac{4}{8}$	0	10	1	$0\frac{4}{8}$	1	3	1	$5\frac{4}{8}$	1	8
... 8½	0	$7\frac{7}{8}$	0	$10\frac{5}{8}$	1	$1\frac{2}{8}$	1	$3\frac{7}{8}$	1	$6\frac{4}{8}$	1	$9\frac{3}{8}$
... 9	0	$8\frac{3}{8}$	0	$11\frac{2}{8}$	1	2	1	$4\frac{7}{8}$	1	$7\frac{5}{8}$	1	$10\frac{4}{8}$
... 9½	0	$8\frac{7}{8}$	0	$11\frac{7}{8}$	1	$2\frac{6}{8}$	1	$5\frac{6}{8}$	1	$8\frac{6}{8}$	1	$11\frac{6}{8}$
... 10	0	$9\frac{3}{8}$	1	$0\frac{4}{8}$	1	$3\frac{5}{8}$	1	$6\frac{6}{8}$	1	$9\frac{7}{8}$	2	1
... 10½	0	$9\frac{6}{8}$	1	$1\frac{1}{8}$	1	$4\frac{3}{8}$	1	$7\frac{5}{8}$	1	$10\frac{7}{8}$	2	$2\frac{2}{8}$
... 11	0	$10\frac{2}{8}$	1	$1\frac{6}{8}$	1	$5\frac{1}{8}$	1	$8\frac{5}{8}$	2	0	2	$3\frac{4}{8}$
... 11½	0	$10\frac{6}{8}$	1	$2\frac{3}{8}$	1	$5\frac{7}{8}$	1	$9\frac{4}{8}$	2	$1\frac{1}{8}$	2	$4\frac{6}{8}$
... 12	0	$11\frac{2}{8}$	1	3	1	$6\frac{6}{8}$	1	$10\frac{4}{8}$	2	$2\frac{2}{8}$	2	6
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
8 by In. 8	0	8	0	$10\frac{5}{8}$	1	$1\frac{2}{8}$	1	4	1	$6\frac{5}{8}$	1	$9\frac{1}{8}$
... 8½	0	$8\frac{4}{8}$	0	$11\frac{2}{8}$	1	$2\frac{1}{8}$	1	5	1	$7\frac{6}{8}$	1	$10\frac{5}{8}$
... 9	0	9	1	0	1	3	1	6	1	9	2	0
... 9½	0	$9\frac{4}{8}$	1	$0\frac{5}{8}$	1	$3\frac{6}{8}$	1	7	1	$10\frac{1}{8}$	2	$1\frac{2}{8}$
... 10	0	10	1	$1\frac{4}{8}$	1	$4\frac{5}{8}$	1	8	1	$11\frac{2}{8}$	2	$2\frac{5}{8}$
... 10½	0	$10\frac{4}{8}$	1	2	1	$5\frac{4}{8}$	1	9	2	$0\frac{2}{8}$	2	4
... 11	0	11	1	$2\frac{5}{8}$	1	$6\frac{2}{8}$	1	10	2	$1\frac{5}{8}$	2	$5\frac{3}{8}$
... 11½	0	$11\frac{4}{8}$	1	$3\frac{2}{8}$	1	$7\frac{1}{8}$	1	11	2	$2\frac{6}{8}$	2	$6\frac{7}{8}$
... 12	0	1	1	4	1	8	2	0	2	4	2	8

SCANTLING.	4s. 6d.		5s.		5s. 6d.		6s.		6s. 6d.		7s.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
6½ In. by 9½	1	11⅛	2	1⅝	2	4⅜	2	6⅞	2	9⅜	3	0
... 10	2	0⅜	2	3	2	5⅝	2	8⅝	2	11⅞	3	1⅞
... 10½	2	1⅝	2	4⅜	2	7⅜	2	10⅛	3	0⅞	3	3⅝
... 11	2	2⅝	2	5⅝	2	8⅝	2	11⅝	3	2⅝	3	5⅝
... 11½	2	4	2	7⅛	2	10⅜	3	1⅜	3	4⅜	3	7⅝
... 12	2	5⅜	2	8⅝	2	11⅝	3	3	3	6⅜	3	9⅝
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
7 In. by 7	1	6⅜	1	8⅜	1	10⅜	2	0⅜	2	2⅝	2	4⅝
... 7½	1	7⅝	1	9⅞	2	0	2	2⅜	2	4⅜	2	6⅝
... 8	1	9	1	11⅜	2	1⅝	2	4	2	6⅞	2	8⅝
... 8½	1	10⅜	2	0⅝	2	3⅜	2	5⅝	2	8⅛	2	10⅝
... 9	1	11⅝	2	2⅝	2	4⅞	2	7⅛	2	10⅝	3	0⅜
... 9½	2	0⅞	2	3⅝	2	6⅜	2	9⅜	3	0	3	2⅜
... 10	2	2⅜	2	5⅛	2	8	2	11	3	1⅞	3	4⅜
... 10½	2	3⅝	2	6⅝	2	9⅝	3	0⅝	3	3⅝	3	6⅞
... 11	2	4⅞	2	8	2	11⅜	3	2⅛	3	5⅜	3	8⅞
... 11½	2	6⅛	2	9⅛	3	0⅞	3	4⅜	3	7⅛	3	10⅞
... 12	2	7⅛	2	11	3	2⅛	3	6	3	9⅛	4	1
	s.	d	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
7½ In. by 7½	1	9	1	11⅜	2	1⅝	2	4⅛	2	6⅜	2	8⅝
... 8	1	10⅛	2	1	2	3⅛	2	6	2	8⅛	2	11
... 8½	1	11⅞	2	2⅛	2	5⅛	2	7⅞	2	10⅛	3	1⅛
... 9	2	1⅛	2	4⅛	2	6⅛	2	9⅝	3	0⅛	3	3⅜
... 9½	2	2⅝	2	5⅝	2	8⅜	2	11⅝	3	2⅛	3	5⅛
... 10	2	4⅛	2	7⅛	2	10⅜	3	1⅛	3	4⅛	3	7⅝
... 10½	2	5⅛	2	8⅜	3	0	3	3⅜	3	6⅜	3	9⅞
... 11	2	6⅞	2	10⅜	3	1⅝	3	5⅛	3	8⅜	4	0⅛
... 11½	2	8⅛	2	11⅝	3	3⅛	3	7⅛	3	10⅝	4	2⅜
... 12	2	9⅝	3	1⅛	3	5⅛	3	9	4	0⅝	4	4⅛
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s	d.
8 In. by 8	2	0	2	2⅝	2	5⅛	2	8	2	10⅝	3	1⅛
... 8½	2	1⅛	2	4⅛	2	7⅛	2	10	3	0⅝	3	3⅝
... 9	2	3	2	6	2	9	3	0	3	3	3	6
... 9½	2	4⅛	2	7⅝	2	10⅝	3	2	3	5⅛	3	8⅛
... 10	2	6	2	9⅛	3	0⅛	3	4	3	7⅛	3	10⅝
... 10½	2	7⅛	2	11	3	2⅛	3	6	3	9⅛	4	1
... 11	2	9	3	0⅝	3	4⅛	3	8	3	11⅝	4	3⅛
... 11½	2	10⅛	3	2⅛	3	6⅛	3	10	4	1⅝	4	5⅝
... 12	3	0	3	4	3	8	4	0	4	4	4	8

SCANTLING.	1s. 6d.	2s.	2s. 6d.	3s.	3s. 6d.	4s.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
$8\frac{1}{2}$ In. by $8\frac{1}{2}$	0 9	1 0	1 3	1 6	1 9	2 0
... 9	0 $9\frac{4}{5}$	1 $0\frac{6}{5}$	1 $3\frac{7}{8}$	1 $7\frac{1}{8}$	1 $10\frac{2}{8}$	2 $1\frac{3}{8}$
... $9\frac{1}{2}$	0 10	1 $1\frac{3}{5}$	1 $4\frac{6}{5}$	1 $8\frac{1}{8}$	1 $11\frac{1}{8}$	2 $2\frac{1}{8}$
... 10	0 $10\frac{5}{8}$	1 $2\frac{1}{8}$	1 $5\frac{5}{8}$	1 $9\frac{2}{8}$	2 $0\frac{6}{8}$	2 $4\frac{2}{8}$
... $10\frac{1}{2}$	0 $11\frac{1}{5}$	1 $2\frac{7}{8}$	1 $6\frac{4}{8}$	1 $10\frac{2}{8}$	2 2	2 $5\frac{6}{8}$
... 11	0 $11\frac{5}{8}$	1 $3\frac{4}{8}$	1 $7\frac{3}{8}$	1 11	2 $3\frac{2}{8}$	2 $7\frac{4}{8}$
... $11\frac{1}{2}$	1 $0\frac{1}{8}$	1 $4\frac{2}{8}$	1 $8\frac{2}{8}$	2 $0\frac{2}{8}$	2 $4\frac{4}{8}$	2 $8\frac{4}{8}$
... 12	1 $0\frac{6}{5}$	1 5	1 $9\frac{2}{8}$	2 $1\frac{4}{8}$	2 $5\frac{6}{8}$	2 10
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
9 In. by 9	0 $10\frac{1}{5}$	1 $1\frac{4}{8}$	1 $4\frac{7}{8}$	1 $8\frac{2}{8}$	1 $11\frac{5}{8}$	2 3
... $9\frac{1}{2}$	0 $10\frac{5}{8}$	1 $2\frac{2}{8}$	1 $5\frac{6}{8}$	1 $9\frac{3}{8}$	2 $0\frac{1}{8}$	2 $4\frac{5}{8}$
... 10	0 $11\frac{2}{5}$	1 3	1 $6\frac{4}{8}$	1 $10\frac{4}{8}$	2 $2\frac{2}{8}$	2 6
... $10\frac{1}{2}$	0 $11\frac{6}{8}$	1 $3\frac{6}{8}$	1 $7\frac{5}{8}$	1 $11\frac{5}{8}$	2 $3\frac{4}{8}$	2 $7\frac{4}{8}$
... 11	1 $0\frac{2}{5}$	1 $4\frac{4}{8}$	1 $8\frac{5}{8}$	2 $0\frac{6}{8}$	2 $4\frac{7}{8}$	2 9
... $11\frac{1}{2}$	1 $0\frac{7}{8}$	1 $5\frac{2}{8}$	1 $9\frac{4}{8}$	2 $1\frac{7}{8}$	2 $6\frac{1}{8}$	2 $10\frac{4}{8}$
... 12	1 $1\frac{4}{8}$	1 6	1 $10\frac{4}{8}$	2 3	2 $7\frac{4}{8}$	3 0
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
$9\frac{1}{2}$ In. by $9\frac{1}{2}$	0 $11\frac{2}{5}$	1 3	1 $6\frac{5}{8}$	1 $10\frac{4}{8}$	2 $2\frac{2}{8}$	2 6
... 10	0 $11\frac{7}{8}$	1 $3\frac{6}{8}$	1 $7\frac{6}{8}$	1 $11\frac{6}{8}$	2 $3\frac{5}{8}$	2 $7\frac{5}{8}$
... $10\frac{1}{2}$	1 $0\frac{3}{8}$	1 $4\frac{5}{8}$	1 $8\frac{6}{8}$	2 $0\frac{7}{8}$	2 5	2 $9\frac{2}{8}$
... 11	1 1	1 $5\frac{3}{8}$	1 $9\frac{6}{8}$	2 $2\frac{5}{8}$	2 $6\frac{3}{8}$	2 $10\frac{6}{8}$
... $11\frac{1}{2}$	1 $1\frac{5}{8}$	1 $6\frac{1}{8}$	1 $10\frac{6}{8}$	2 $3\frac{2}{8}$	2 $7\frac{6}{8}$	3 $0\frac{3}{8}$
... 12	1 $2\frac{2}{8}$	1 7	1 $11\frac{6}{8}$	2 $4\frac{4}{8}$	2 $9\frac{2}{8}$	3 2
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
10 In. by 10	1 $0\frac{4}{5}$	1 $4\frac{5}{8}$	1 $8\frac{6}{5}$	2 1	2 $5\frac{1}{8}$	2 $9\frac{3}{8}$
... $10\frac{1}{2}$	1 $1\frac{1}{8}$	1 $5\frac{4}{8}$	1 $9\frac{5}{8}$	2 $2\frac{2}{8}$	2 $6\frac{3}{8}$	2 11
... 11	1 $1\frac{6}{8}$	1 $6\frac{2}{8}$	1 $10\frac{7}{8}$	2 $3\frac{4}{8}$	2 8	3 $0\frac{5}{8}$
... $11\frac{1}{2}$	1 $2\frac{2}{8}$	1 $7\frac{1}{8}$	1 $11\frac{7}{8}$	2 $4\frac{6}{8}$	2 $9\frac{4}{8}$	3 $2\frac{3}{8}$
... 12	1 3	1 8	2 1	2 6	2 11	3 4
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
$10\frac{1}{2}$ In. by $10\frac{1}{2}$	1 $1\frac{6}{8}$	1 $6\frac{3}{8}$	1 $10\frac{7}{8}$	2 $3\frac{4}{8}$	2 $8\frac{1}{8}$	3 $0\frac{6}{8}$
... 11	1 $2\frac{2}{8}$	1 $7\frac{2}{8}$	2 0	2 $4\frac{1}{8}$	2 $9\frac{2}{8}$	3 $2\frac{4}{8}$
... $11\frac{1}{2}$	1 3	1 $8\frac{1}{8}$	2 $1\frac{1}{8}$	2 $6\frac{1}{8}$	2 $11\frac{1}{8}$	3 $4\frac{4}{8}$
... 12	1 $3\frac{6}{8}$	1 9	2 $2\frac{5}{8}$	2 $7\frac{4}{8}$	3 $0\frac{6}{8}$	3 6
	s. d.	s. d.	s d.	s. d.	s. d.	s. d.
11 In. by 11	1 $3\frac{1}{8}$	1 $8\frac{1}{8}$	2 $1\frac{1}{8}$	2 $6\frac{2}{8}$	2 $11\frac{2}{8}$	3 $4\frac{2}{8}$
... $11\frac{1}{2}$	1 $3\frac{6}{8}$	1 9	2 $2\frac{2}{8}$	2 $7\frac{1}{8}$	3 $0\frac{5}{8}$	3 $6\frac{1}{8}$
... 12	1 $4\frac{4}{8}$	1 10	2 $3\frac{4}{8}$	2 9	3 $2\frac{4}{8}$	3 8
	s. d.	s. d	s. d.	s. d.	s. d	s. d.
$11\frac{1}{2}$ In. by $11\frac{1}{2}$	1 $4\frac{4}{8}$	1 10	2 $3\frac{4}{8}$	2 9	3 $2\frac{4}{8}$	3 8
... 12	1 $5\frac{2}{8}$	1 11	2 $4\frac{6}{8}$	2 $10\frac{4}{8}$	3 $4\frac{2}{8}$	3 10

SCANTLING.	4s. 6d.	5s.	5s. 6d.	6s.	6s. 6d.	7s.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
8½ In. by 8½	2 3	2 6	2 9	3 0⅛	3 3⅛	3 6⅛
... 9	2 4⅝	2 7⅝	2 11	3 2⅜	3 5⅜	3 8⅜
... 9½	2 6⅜	2 9⅜	3 1	3 4⅝	3 7⅝	3 11
... 10	2 7⅝	2 11⅝	3 2⅞	3 6⅝	3 10	4 1⅝
... 10½	2 9⅜	3 1⅜	3 4⅞	3 8⅝	4 0⅜	4 4
.. 11	2 11	3 2⅞	3 6⅝	3 10⅝	4 2⅝	4 6⅝
... 11½	3 0⅝	3 4⅝	3 8⅝	4 0⅞	4 4⅞	4 9
... 12	3 2⅜	3 6⅜	3 10⅝	4 3	4 7⅜	4 11⅝
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
9 In. by 9	2 6⅜	2 9⅝	3 1⅜	3 4⅝	3 7⅞	3 11⅜
... 9½	2 8	2 11⅝	3 3⅛	3 6⅝	3 10⅜	4 1⅞
... 10	2 9⅝	3 1⅜	3 5⅜	3 9	4 0⅝	4 4⅜
... 10½	2 11⅜	3 3⅜	3 7⅜	3 11⅜	4 3⅛	4 7⅛
... 11	3 1⅛	3 5⅜	3 9⅜	4 1⅝	4 5⅝	4 9⅝
... 11½	3 2⅝	3 7⅛	3 11⅜	4 3⅝	4 8	5 0⅜
... 12	3 4⅜	3 9	4 1⅜	4 6	4 10⅛	5 3
	s. d	s. d.	s. d.	s. d.	s. d.	s. d.
9½ In. by 9½	2 9⅝	3 1⅝	3 5⅜	3 9⅛	4 0⅞	4 4⅝
... 10	2 11⅝	3 3⅝	3 7⅛	3 11⅛	4 3⅜	4 7⅝
... 10½	3 1⅜	3 5⅝	3 9⅝	4 1⅞	4 6	4 10⅛
... 11	3 3⅛	3 7⅝	3 11⅞	4 4⅜	4 8⅝	5 0⅞
... 11½	3 4⅞	3 9⅝	4 2	4 6⅝	4 11⅛	5 3⅝
... 12	3 6⅝	3 11⅝	4 4⅜	4 9	5 1⅝	5 6⅜
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
10 In. by 10	3 1⅝	3 5⅝	3 9⅝	4 2	4 6⅛	4 10⅝
... 10½	3 3⅜	3 7⅝	4 0⅛	4 4⅝	4 8⅞	5 1⅜
... 11	3 5⅜	3 9⅝	4 2⅜	4 7	4 11⅝	5 4⅛
... 11½	3 7⅛	3 11⅞	4 4⅝	4 9⅝	5 2⅜	5 7
... 12	3 9	4 2	4 7	5 0	5 5	5 10
	s. d.	s. d.	s. d.	s. d	s. d.	s. d.
10½ In by 10½	3 5⅜	3 9⅞	4 2⅝	4 7⅛	4 11⅝	5 4⅜
... 11	3 7⅜	4 0⅛	4 4⅞	4 9⅝	5 2⅝	5 7⅝
... 11½	3 9⅜	4 2⅜	4 7⅛	5 0⅜	5 5⅜	5 10⅝
... 12	3 11⅜	4 4⅝	4 9⅝	5 3	5 8⅜	6 1⅝
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
11 In. by 11	3 9⅜	4 2⅝	4 7⅜	5 0⅝	5 5⅝	5 10⅝
... 11½	3 11⅜	4 4⅝	4 9⅞	5 3⅝	5 8⅝	6 1⅝
.. 12	4 1⅝	4 7	5 0⅝	5 6	5 11⅝	6 5
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
11½ In. by 11½	4 1⅝	4 7	5 0⅝	5 6⅛	5 11⅝	6 5⅛
... 12	4 3⅝	4 9⅜	5 3⅜	5 9	6 2⅝	6 8⅝

TABLE VII.

SHOWING WHAT LENGTH OF A PLANK, FLAG-STONE, &c., AT ANY GIVEN BREADTH, MAKES A SQUARE FOOT.

EXPLANATION OF THE TABLE.

THE breadth of a plank, flag-stone, marble slab, &c., being known; by referring to the following table, you will find the length required to make a square foot superficial measure, at any given breadth, from 1 inch to 72 inches broad.

The page is divided into two parts; the first column of each part contains the breadth in inches; the other five columns contain the length required, (at the breadth stated in the first column,) to make a square foot. The length is given in feet, inches, parts, seconds, thirds, and fourths.—*Ft.* stands for feet, *In.* for inches, *Pts.* for twelfths of an inch, 2*ds.* for twelfths of a part, 3*ds.* for twelfths of a second, and 4*ths.* for twelfths of a third.

EXAMPLES.

1. What length of a plank, 18 inches broad, will be required to make a square foot?

Look in the first column of the part for 18 inches, directly opposite to which in the other columns, marked length, and you will find 0 8 0 0 0 0 or 8 inches, the length required.

2. What length of a plank, 7 inches broad, will be required to make a square foot?

Look in the column marked breadth for 7 inches, directly opposite which in the other columns, marked length, you will find 1 8 6 10 3 5, or 1 foot eight inches, six parts, ten seconds, three thirds, and five fourths, the answer.

The length required to make a square foot at any breadth, may be found as follows:

Rule.—Divide 144 (the square inches in a square foot,) by the inches in the breadth of the plank, the quotient is the length required; if there is a remainder, multiply it by 12, and divide by the inches in the breadth for parts, and continue the same operation for seconds, &c.

EXAMPLES.

1. What length of a board 9 inches broad, is required to make a superficial or square foot?

9)144(16
9
—
54
54
—

or 16 inches, the length required.

2. It is required to cut off from the end of a mahogany board $40\frac{1}{2}$ inches broad, a piece which shall measure exactly a square foot?

$40\frac{1}{2}$)144
2 2
— —
81)288(3 . 6 . 8
243
—
45
12
—
540
486
—
54
12
—
648
648
—

Answer. 3 inches, 6 parts, 8 seconds.

In the above example, both the breadth of the plank, and the inches in a square foot, are multiplied by 2, in order to get quit of the fraction in the divisor.

Breadth.	Length required to make a square foot.					
In.	Ft.	In.	Pts.	2ds.	3ds.	4ths.
1	12	0	0	0	0	0
1½	8	0	0	0	0	0
2	6	0	0	0	0	0
2½	4	9	7	2	4	10
3	4	0	0	0	0	0
3½	3	5	1	8	6	10
4	3	0	0	0	0	0
4½	2	8	0	0	0	0
5	2	4	9	7	2	5
5½	2	2	2	2	2	2
6	2	0	0	0	0	0
6½	1	10	1	10	1	10
7	1	8	6	10	3	5
7½	1	7	2	4	9	7
8	1	6	0	0	0	0
8½	1	4	11	3	6	4
9	1	4	0	0	0	0
9½	1	3	1	10	8	10
10	1	2	4	9	7	2
10½	1	1	8	6	10	3
11	1	1	1	1	1	1
11½	1	0	6	3	1	7
12	1	0	0	0	0	0
12½	0	11	6	2	10	7
13	0	11	0	11	0	11
13½	0	10	8	0	0	0
14	0	10	3	5	1	8
14½	0	9	11	2	0	10
15	0	9	7	2	4	9
15½	0	9	3	5	9	8
16	0	9	0	0	0	0
16½	0	8	8	8	8	9
17	0	8	5	7	9	2
17½	0	8	2	8	11	0
18	0	8	0	0	0	0
18½	0	7	9	4	10	5
19	0	7	6	11	4	5
19½	0	7	4	7	4	7
20	0	7	2	4	9	7
20½	0	7	0	3	6	2
21	0	6	10	3	5	2
21½	0	6	8	4	5	7
22	0	6	6	6	6	6

Breadth.	Length required to make a square foot.					
In.	Ft	In.	Pts.	2ds.	3ds.	4ths.
22½	0	6	4	9	7	2
23	0	6	3	1	6	9
23½	0	6	1	6	4	7
24	0	6	0	0	0	0
24½	0	5	10	6	4	5
25	0	5	9	1	5	3
25½	0	5	7	9	2	1
26	0	5	6	5	6	5
26½	0	5	5	2	5	11
27	0	5	4	0	0	0
27½	0	5	2	10	0	5
28	0	5	1	8	6	10
28½	0	5	0	7	6	11
29	0	4	11	7	0	5
29½	0	4	10	6	11	0
30	0	4	9	7	2	5
30½	0	4	8	7	10	5
31	0	4	7	8	10	10
31½	0	4	6	10	3	5
32	0	4	6	0	0	0
32½	0	4	5	2	0	4
33	0	4	4	4	4	4
33½	0	4	3	6	11	10
34	0	4	2	9	10	7
34½	0	4	2	1	0	6
35	0	4	1	4	5	6
35½	0	4	0	8	1	4
36	0	4	0	0	0	0
36½	0	3	11	4	1	4
37	0	3	10	8	5	2
37½	0	3	10	0	11	6
38	0	3	9	5	8	3
38½	0	3	8	10	7	2
39	0	3	8	3	8	4
39½	0	3	7	8	11	7
40	0	3	7	2	4	9
40½	0	3	6	8	0	0
41	0	3	6	1	9	1
41½	0	3	5	7	7	11
42	0	3	5	1	8	7
42½	0	3	4	7	10	10
43	0	3	4	2	2	9
43½	0	3	3	8	8	3

Breadth.	Length required to make a square foot.					
In.	Ft.	In.	Pts.	2ds.	3ds.	4ths.
44	0	3	3	3	3	3
44½	0	3	2	9	11	9
45	0	3	2	4	9	7
45½	0	3	1	11	8	10
46	0	3	1	6	9	4
46½	0	3	1	1	11	2
47	0	3	0	9	2	4
47½	0	3	0	4	6	7
48	0	3	0	0	0	0
48½	0	2	11	7	6	7
49	0	2	11	3	2	2
49½	0	2	10	10	10	11
50	0	2	10	6	8	8
50½	0	2	10	2	7	4
51	0	2	9	10	7	1
51½	0	2	9	6	7	8
52	0	2	9	2	9	3
52½	0	2	8	10	11	8
53	0	2	8	7	3	0
53½	0	2	8	3	7	1
54	0	2	8	0	0	0
54½	0	2	7	8	5	9
55	0	2	7	5	0	3
55½	0	2	7	1	7	6
56	0	2	6	10	3	5
56½	0	2	6	7	0	1
57	0	2	6	3	9	6
57½	0	2	6	0	7	6
58	0	2	1	9	6	2

Breadth.	Length required to make a square foot.					
In.	Ft.	In.	Pts.	2ds.	3ds.	4ths.
58½	0	2	5	6	5	3
59	0	2	5	3	5	6
59½	0	2	5	0	6	1
60	0	2	4	9	7	2
60½	0	2	4	6	8	11
61	0	2	4	3	11	3
61½	0	2	4	1	2	1
62	0	2	3	10	5	5
62½	0	2	3	7	9	4
63	0	2	3	5	1	9
63½	0	2	3	2	6	7
64	0	2	3	0	0	0
64½	0	2	2	9	5	10
65	0	2	2	7	0	2
65½	0	2	2	4	7	0
66	0	2	2	2	2	2
66½	0	2	1	11	9	10
67	0	2	1	9	5	11
67½	0	2	1	7	2	5
68	0	2	1	4	11	4
68½	0	2	1	2	8	7
69	0	2	1	0	6	3
69½	0	2	0	10	4	4
70	0	2	0	8	2	9
70½	0	2	0	6	1	6
71	0	2	0	4	0	8
71½	0	2	0	2	0	2
72	0	2	0	0	0	0

TABLE VIII.

SHOWING WHAT LENGTH OF A LOG, PLANK, STONE, &C., HAVING THE SIDE OF THE SQUARE GIVEN, MAKES A SOLID FOOT.

EXPLANATION OF THE TABLE.

When the side of the square of a log, plank, stone, &c., is known, the following Table will show what length will be required to make a solid foot, from 1 inch to 42 inches the side of the square.

The page is divided into two parts, and each part into seven columns; the first, or left hand column of each part, contains the side of the square in inches, and the other six columns contain the length required to make a solid foot, (at the side of the square stated in the first column,) in feet, inches, parts, seconds, thirds, and fourths.—*Ft.* stands for feet; *In.* for inches; *Pts.* for twelfths of an inch; 2*ds.* for twelfths of a part; 3*ds.* for twelfths of a second; and 4*ths.* for twelfths of a third.

If the log, plank, stone, &c., be unequal sided, the side of the square must be found by referring to the table of unequal sided timber.

Note—This table is applicable to timber, stone, &c., of any form, whether square, triangular or round, provided it be uniform in dimensions, from end to end; the side of the square having been previously found as above directed.

EXAMPLES.

1. A piece of timber is 9 inches, the side of the square, what length is required to make a solid foot?

Look in the left hand column for 9 inches, opposite which in the other columns, under length, you will find 1 9 4 0 0 0, or 1 foot 9 inches, and 4 parts, &c. the answer.

2. What length of a log 35 inches the side of the square, is required to make a solid foot?

Look in the table for 35 inches the side of the square, opposite which stands 0 1 4 11 1 6, or 1 inch, 4 parts, 11 seconds, 1 third, and 6 fourths, the length required.

The following rule and examples will show the method of computation, and may be useful when the timber, stone, &c., extends beyond the table.

Rule.—Divide 1728, the solid inches in a solid foot, by the product of the breadth by the depth, or area of the end in inches, the quotient will be the inches in length, required to make a solid foot; if there is a remainder, multiply it by 12, and divide again by the same divisor for parts, and so on for 2ds., 3ds., &c.

EXAMPLE.

1. A log is 36 inches the side of the square, what length is required to make a solid foot?

36 side of the square.
36 multiplied by itself.

216
108

area of end 1296)1728(1 . 4
1296

432
12

5184
5184

or 1 inch, 4 parts, the length required.

Side of the Square.	Length required to make a cubic foot.					
In.	Ft.	In.	Pts.	2ds.	3ds.	4ths.
1	144	0	0	0	0	0
1½	64	0	0	0	0	0
2	36	0	0	0	0	0
2½	23	0	5	9	1	5
3	16	0	0	0	0	0
3½	11	9	0	8	9	10
4	9	0	0	0	0	0
4½	7	1	4	0	0	0
5	5	9	1	5	3	4
5½	4	9	1	5	10	3
6	4	0	0	0	0	0
6½	3	4	10	9	6	2
7	2	11	3	2	2	5
7½	2	6	8	7	8	2
8	2	3	0	0	0	0
8½	1	11	11	0	0	6
9	1	9	4	0	0	0
9½	1	7	1	9	3	0
10	1	5	3	4	3	11
10½	1	3	8	0	11	9
11	1	2	3	4	5	7
11½	1	1	0	9	6	4
12	1	0	0	0	0	0
12½	0	11	0	8	6	4
13	0	10	2	8	4	7
13½	0	9	5	9	4	0
14	0	8	9	9	6	7
14½	0	8	2	7	6	0
15	0	7	8	1	11	0
15½	0	7	2	3	8	8
16	0	6	9	0	0	0
16½	0	6	4	1	11	10
17	0	5	11	9	0	1
17½	0	5	7	8	6	2
18	0	5	4	0	0	0
18½	0	5	0	7	0	7
19	0	4	9	5	3	9
19½	0	4	6	6	4	8
20	0	4	3	10	1	0
20½	0	4	1	4	1	3
21	0	3	11	0	2	11
21½	0	3	8	10	3	8

Side of the Square.	Length required to make a cubic foot.					
In.	Ft.	In.	Pts.	2ds.	3ds.	4ths.
22	0	3	6	10	1	5
22½	0	3	4	11	6	3
23	0	3	3	2	4	7
23½	0	3	1	6	6	11
24	0	3	0	0	0	0
24½	0	2	10	6	6	7
25	0	2	9	2	1	7
25½	0	2	7	10	8	1
26	0	2	6	8	1	2
26½	0	2	5	6	4	0
27	0	2	4	5	4	0
27½	0	2	3	5	0	5
28	0	2	2	5	4	8
28½	0	2	1	6	4	4
29	0	2	0	7	10	6
29½	0	1	11	9	11	2
30	0	1	11	0	5	9
30½	0	1	10	3	5	10
31	0	1	9	6	11	2
31½	0	1	8	10	9	4
32	0	1	8	3	0	0
32½	0	1	7	7	7	0
33	0	1	7	0	5	11
33½	0	1	6	5	8	9
34	0	1	5	11	3	0
34½	0	1	5	5	0	8
35	0	1	4	11	1	6
35½	0	1	4	5	5	4
36	0	1	4	0	0	0
36½	0	1	3	6	9	4
37	0	1	3	1	9	2
37½	0	1	2	8	11	4
38	0	1	2	4	3	11
38½	0	1	1	11	10	6
39	0	1	1	7	7	3
39½	0	1	1	3	5	9
40	0	1	0	11	6	3
40½	0	1	0	7	8	5
41	0	1	0	4	0	4
41½	0	1	0	0	5	9
42	0	0	11	9	0	8

TABLE IX.

Showing the number of bricks in a wall or building, at six various thicknesses, commencing with brick on edge, then rising from a half brick on bed to 2½ bricks thick, and containing from ¼ to 200 superficial or square yards.

The Table is divided into 7 columns; in the first column on the left is the content in square yards, rising by ¼, ½, ¾, and 1 to 36, or 1 rood, then 60, 72, 90, 100, 200, and by the addition of two of these numbers, any content may be found up to 136 yards; the various thicknesses are placed along the top of the other 6 columns, under which is found the quantity of bricks required for any thickness opposite any given number of yards in the left hand column.

Bricks were usually made to measure about 9 inches long, 4½ inches broad, and 3 inches thick; but there being formerly an excise duty of 6s. 1½d. per 1000 levied on all bricks which did not exceed 150 cubic inches in the *green* state, some manufacturers endeavoured to turn out their bricks as near that content as possible. Thus, from the *manner* of the manufacture, the *quality* of the material, and the *form* of the mould, bricks varied after being burned from the above-mentioned size up to 9⅝ inches long, 4¾ inches broad, and 3⅝ inches thick, and may average about 9¼ inches long, 4⅝ inches broad, and 3 1/16 inches thick. Of the first mentioned, or smaller size, about 4050 bricks will be required to build an English *rod*, and 4860 for a Scotch *rood*, standard thickness; of the larger size about 3600 will be required for a rod, and 4320 for a rood, and the Table has been calculated to suit the two sorts, beginning with the smaller size first.

In Scotland brick work is generally calculated by the square yard, or by the rood of 36 square yards; in England it is calculated by the square rod, or 30¼ square yards, equal to 272¼ square feet, but as the fraction is troublesome in practice it is usually omitted.

Brick and half thick, or, making allowance for mortar, 14

inches thick, is the standard thickness for brick work; and buildings which exceed this, must be reduced to the standard before computing the price. To do this the rule is,—Multiply the superficial content of the building by the number of half bricks in the thickness, and divide by 3; the quotient is the content, standard thickness. Thus, to reduce work of 2 bricks thick to standard, multiply by 4 and divide by 3; and to reduce work of $2\frac{1}{2}$ bricks thick to standard, multiply by 5 and divide by 3.

A rod of brick work, standard thickness, contains 306 cubic feet; and to reduce a measurement given in cubic feet to standard thickness, multiply the number of cubic feet by 8 and divide by 9; the quotient is superficial feet, standard thickness, which divide by 9 to reduce to square yards, if required, or refer to Table IV.

EXAMPLES.

1. Required the number of bricks of the smaller size in a wall nine inches, or 1 brick thick, and measuring 49 square yards?

As the number 49 is not in the Table, add together the numbers opposite 24 and 25=49—thus, under 1 brick thick,

opposite 24 yards, stands	2160
and opposite 25 yards stands	2250
The number of bricks required . . .	4410

2. What number of bricks of the larger size will be required to build a wall measuring 121 square yards, standard thickness?

Under $1\frac{1}{2}$ brick thick, opposite 100 yards, stands	12000
and opposite 21 yards stands	2520
The number of bricks required . . .	14520

3. How many square yards, standard thickness, are in a building $2\frac{1}{2}$ bricks thick, and measuring 3024 square feet; also, the number of bricks of the larger size required for its formation?

Divide the square feet by 9 to reduce them to square yards, ... 9)3024

gives square yards, $2\frac{1}{2}$ bricks thick, . . . 336

Multiply by 5, the number of half bricks thick, 5

and divide by 3, the number of $\frac{1}{2}$ bricks in standard, 3)1680

Standard square yards, ... 560

Then, under $1\frac{1}{2}$ brick thick in the Table, opposite 100 yards, stands 12000

which, to make 500, multiply by . . . 5

60000

and opposite 60 yards stands 7200

Number of bricks required 67200

4. In a building containing 1296 cubic feet of brick work, how many square feet and square yards are there, standard thickness?

Multiply the cubic feet 1296

by 8

and divide by . . . . . 9)10368

which gives standard sq. ft.; to reduce to yds. divide by 9)1152

which gives standard square yards . . . 128

Content.	Brick on edge.	½ brick on bed.	1 brick thick.	1½ brick thick.	2 bricks thick.	2½ bricks thick.
Sq. Yds.	Bricks.	Bricks.	Bricks.	Bricks.	Bricks.	Bricks.
¼	7½	11¼	22½	33¾	45	56¼
½	15	22½	45	67½	90	112½
¾	22½	33¾	67½	101¼	135	168¾
1	30	45	90	135	180	225
2	60	90	180	270	360	450
3	90	135	270	405	540	675
4	120	180	360	540	720	900
5	150	225	450	675	900	1125
6	180	270	540	810	1080	1350
7	210	315	630	945	1260	1575
8	240	360	720	1080	1440	1800
9	270	405	810	1215	1620	2025
10	300	450	900	1350	1800	2250
11	330	495	990	1485	1980	2475
12	360	540	1080	1620	2160	2700
13	390	585	1170	1755	2340	2925
14	420	630	1260	1890	2520	3150
15	450	675	1350	2025	2700	3375
16	480	720	1440	2160	2880	3600
17	510	765	1530	2295	3060	3825
18	540	810	1620	2430	3240	4050
19	570	855	1710	2565	3420	4275
20	600	900	1800	2700	3600	4500
21	630	945	1890	2835	3780	4725
22	660	990	1980	2970	3960	4950
23	690	1035	2070	3105	4140	5175
24	720	1080	2160	3240	4320	5400
25	750	1125	2250	3375	4500	5625
26	780	1170	2340	3510	4680	5850
27	810	1215	2430	3645	4860	6075
28	840	1260	2520	3780	5040	6300
29	870	1305	2610	3915	5220	6525
30	900	1350	2700	4050	5400	6750
31	930	1395	2790	4185	5580	6975
32	960	1440	2880	4320	5760	7200
33	990	1485	2970	4455	5940	7425
34	1020	1530	3060	4590	6120	7650
35	1050	1575	3150	4725	6300	7875
36	1080	1620	3240	4860	6480	8100
60	1800	2700	5400	8100	10800	13500
72	2160	3240	6480	9720	12960	16200
90	2700	4050	8100	12150	16200	20250
100	3000	4500	9000	13500	18000	22500
200	6000	9000	18000	27000	36000	45000

CONTENT.	Brick on edge.	½ brick on bed.	1 brick thick.	1½ brick thick.	2 bricks thick.	2½ bricks thick.
Sq. Yds.	Bricks.	Bricks.	Bricks.	Bricks.	Bricks.	Bricks.
¼	6¾	10	20	30	40	50
½	13½	20	40	60	80	100
¾	20¼	30	60	90	120	150
1	27	40	80	120	160	200
2	54	80	160	240	320	400
3	81	120	240	360	480	600
4	108	160	320	480	640	800
5	135	200	400	600	800	1000
6	162	240	480	720	960	1200
7	189	280	560	840	1120	1400
8	216	320	640	960	1280	1600
9	243	360	720	1080	1440	1800
10	270	400	800	1200	1600	2000
11	297	440	880	1320	1760	2200
12	324	480	960	1440	1920	2400
13	351	520	1040	1560	2080	2600
14	378	560	1120	1680	2240	2800
15	405	600	1200	1800	2400	3000
16	432	640	1280	1920	2560	3200
17	459	680	1360	2040	2720	3400
18	486	720	1440	2160	2880	3600
19	513	760	1520	2280	3040	3800
20	540	800	1600	2400	3200	4000
21	567	840	1680	2520	3360	4200
22	594	880	1760	2640	3520	4400
23	621	920	1840	2760	3680	4600
24	648	960	1920	2880	3840	4800
25	675	1000	2000	3000	4000	5000
26	702	1040	2080	3120	4160	5200
27	729	1080	2160	3240	4320	5400
28	756	1120	2240	3360	4480	5600
29	783	1160	2320	3480	4640	5800
30	810	1200	2400	3600	4800	6000
31	837	1240	2480	3720	4960	6200
32	864	1280	2560	3840	5120	6400
33	891	1320	2640	3960	5280	6600
34	918	1360	2720	4080	5440	6800
35	945	1400	2800	4200	5600	7000
36	972	1440	2880	4320	5760	7200
60	1620	2400	4800	7200	9600	12000
72	1944	2880	5760	8640	11520	14400
90	2430	3600	7200	10800	14400	18000
100	2700	4000	8000	12000	16000	20000
200	5400	8000	16000	24000	32000	40000

TABLE X.

SUPERFICIAL MEASURE FOR GLAZIERS, ETC.

EXPLANATION OF THE TABLE.

By this Table the superficial content of a pane of glass or other piece of work is found at once, commencing at 4 inches by 4 inches, and rising by a quarter of an inch both in the length and breadth, up to $26\frac{1}{4}$ inches by 36 inches. The left hand column of each page contains the length in inches, and quarters of an inch; and along the top of the five divisions, into which the rest of the page is divided, is placed the various breadths; also in inches and quarters of an inch.

To find the superficial content of any pane of glass, &c., look on the top of the pages for the given breadth, under which, and opposite the given length in the left hand column, is found the content required.

EXAMPLES.

1. Required the content of a pane of glass $13\frac{1}{2}$ inches by 18 inches?

Look on the top of the page for $13\frac{1}{2}$, under which, and opposite 18 in the left hand column, is found 1 foot 8 inches and 3 parts, the content required.

2. Required the content of 12 panes of glass, each $17\frac{1}{4}$ inches by $23\frac{3}{4}$ inches?

	Ft.	In.	Pts.
Opposite $23\frac{3}{4}$, and under $17\frac{1}{4}$, is .	2	10	1
multiply by			12
equal	34	1	0

giving the content of the 12 panes, 34 feet and 1 inch.

Inch Long.	4 In. broad.			4¼ In. broad.			4½ In. broad.			4¾ In. broad.			5 In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts	Ft.	In.	Pts.
4	0	1	4	0	1	5	0	1	6	0	1	7	0	1	8
4¼	0	1	5	0	1	6	0	1	7	0	1	8	0	1	9
4½	0	1	6	0	1	7	0	1	8	0	1	9	0	1	10
4¾	0	1	7	0	1	8	0	1	9	0	1	10	0	1	11
5	0	1	8	0	1	9	0	1	10	0	1	11	0	2	1
5¼	0	1	9	0	1	10	0	1	11	0	2	0	0	2	2
5½	0	1	10	0	1	11	0	2	0	0	2	2	0	2	3
5¾	0	1	11	0	2	0	0	2	1	0	2	3	0	2	4
6	0	2	0	0	2	1	0	2	3	0	2	4	0	2	6
6¼	0	2	1	0	2	2	0	2	4	0	2	5	0	2	7
6½	0	2	2	0	2	3	0	2	5	0	2	6	0	2	8
6¾	0	2	3	0	2	4	0	2	6	0	2	8	0	2	9
7	0	2	4	0	2	5	0	2	7	0	2	9	0	2	11
7¼	0	2	5	0	2	6	0	2	8	0	2	10	0	3	0
7½	0	2	6	0	2	7	0	2	9	0	2	11	0	3	1
7¾	0	2	7	0	2	8	0	2	10	0	3	0	0	3	2
8	0	2	8	0	2	10	0	3	0	0	3	2	0	3	4
8¼	0	2	9	0	2	11	0	3	1	0	3	3	0	3	5
8½	0	2	10	0	3	0	0	3	2	0	3	4	0	3	6
8¾	0	2	11	0	3	1	0	3	3	0	3	5	0	3	7
9	0	3	0	0	3	2	0	3	4	0	3	6	0	3	9
9¼	0	3	1	0	3	3	0	3	5	0	3	7	0	3	10
9½	0	3	2	0	3	4	0	3	6	0	3	9	0	3	11
9¾	0	3	3	0	3	5	0	3	7	0	3	10	0	4	0
10	0	3	4	0	3	6	0	3	9	0	3	11	0	4	2
10¼	0	3	5	0	3	7	0	3	10	0	4	0	0	4	3
10½	0	3	6	0	3	8	0	3	11	0	4	1	0	4	4
10¾	0	3	7	0	3	9	0	4	0	0	4	3	0	4	5
11	0	3	8	0	3	10	0	4	1	0	4	4	0	4	7
11¼	0	3	9	0	3	11	0	4	2	0	4	5	0	4	8
11½	0	3	10	0	4	0	0	4	3	0	4	6	0	4	9
11¾	0	3	11	0	4	1	0	4	4	0	4	7	0	4	10
12	0	4	0	0	4	3	0	4	6	0	4	9	0	5	0
12¼	0	4	1	0	4	4	0	4	7	0	4	10	0	5	1
12½	0	4	2	0	4	5	0	4	8	0	4	11	0	5	2
12¾	0	4	3	0	4	6	0	4	9	0	5	0	0	5	3
13	0	4	4	0	4	7	0	4	10	0	5	1	0	5	5
13¼	0	4	5	0	4	8	0	4	11	0	5	2	0	5	6
13½	0	4	6	0	4	9	0	5	0	0	5	4	0	5	7
13¾	0	4	7	0	4	10	0	5	1	0	5	5	0	5	8
14	0	4	8	0	4	11	0	5	3	0	5	6	0	5	10
14¼	0	4	9	0	5	0	0	5	4	0	5	7	0	5	11
14½	0	4	10	0	5	1	0	5	5	0	5	8	0	6	0
14¾	0	4	11	0	5	2	0	5	6	0	5	10	0	6	1

Inch Long.	5¼ In. broad.			5½ In. broad.			5¾ In. broad.			6 In. broad.			6¼ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
5¼	0	2	3	0	2	4	0	2	6	0	2	7	0	2	8
5½	0	2	4	0	2	6	0	2	7	0	2	9	0	2	10
5¾	0	2	6	0	2	7	0	2	9	0	2	10	0	2	11
6	0	2	7	0	2	9	0	2	10	0	3	0	0	3	1
6¼	0	2	8	0	2	10	0	2	11	0	3	1	0	3	3
6½	0	2	10	0	2	11	0	3	1	0	3	3	0	3	4
6¾	0	2	11	0	3	1	0	3	2	0	3	4	0	3	6
7	0	3	0	0	3	2	0	3	4	0	3	6	0	3	7
7¼	0	3	2	0	3	3	0	3	5	0	3	7	0	3	9
7½	0	3	3	0	3	5	0	3	7	0	3	9	0	3	10
7¾	0	3	4	0	3	6	0	3	8	0	3	10	0	4	0
8	0	3	6	0	3	8	0	3	10	0	4	0	0	4	2
8¼	0	3	7	0	3	9	0	3	11	0	4	1	0	4	3
8½	0	3	8	0	3	10	0	4	0	0	4	3	0	4	5
8¾	0	3	9	0	4	0	0	4	2	0	4	4	0	4	6
9	0	3	11	0	4	1	0	4	3	0	4	6	0	4	8
9¼	0	4	0	0	4	2	0	4	5	0	4	7	0	4	9
9½	0	4	1	0	4	4	0	4	6	0	4	9	0	4	11
9¾	0	4	3	0	4	5	0	4	8	0	4	10	0	5	0
10	0	4	4	0	4	7	0	4	9	0	5	0	0	5	2
10¼	0	4	5	0	4	8	0	4	11	0	5	1	0	5	4
10½	0	4	7	0	4	9	0	5	0	0	5	3	0	5	5
10¾	0	4	8	0	4	11	0	5	1	0	5	4	0	5	7
11	0	4	9	0	5	0	0	5	3	0	5	6	0	5	8
11¼	0	4	11	0	5	1	0	5	4	0	5	7	0	5	10
11½	0	5	0	0	5	3	0	5	6	0	5	9	0	5	11
11¾	0	5	1	0	5	4	0	5	7	0	5	10	0	6	1
12	0	5	3	0	5	6	0	5	9	0	6	0	0	6	3
12¼	0	5	4	0	5	7	0	5	10	0	6	1	0	6	4
12½	0	5	5	0	5	8	0	5	11	0	6	3	0	6	6
12¾	0	5	6	0	5	10	0	6	1	0	6	4	0	6	7
13	0	5	8	0	5	11	0	6	2	0	6	6	0	6	9
13¼	0	5	9	0	6	0	0	6	4	0	6	7	0	6	10
13½	0	5	10	0	6	2	0	6	5	0	6	9	0	7	0
13¾	0	6	0	0	6	3	0	6	7	0	6	10	0	7	1
14	0	6	1	0	6	5	0	6	8	0	7	0	0	7	3
14¼	0	6	2	0	6	6	0	6	10	0	7	1	0	7	5
14½	0	6	4	0	6	7	0	6	11	0	7	3	0	7	6
14¾	0	6	5	0	6	9	0	7	0	0	7	4	0	7	8
15	0	6	6	0	6	10	0	7	2	0	7	6	0	7	9
15¼	0	6	8	0	6	11	0	7	3	0	7	7	0	7	11
15½	0	6	9	0	7	1	0	7	5	0	7	9	0	8	0
15¾	0	6	10	0	7	2	0	7	6	0	7	10	0	8	2
16	0	7	0	0	7	4	0	7	8	0	8	0	0	8	4

Inch Long.	6⅓ In. broad.			6⅔ In. broad.			7 In. broad.			7⅓ In. broad.			7⅔ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
6½	0	3	6	0	3	7	0	3	9	0	3	11	0	4	0
6⅔	0	3	7	0	3	9	0	3	11	0	4	0	0	4	2
7	0	3	9	0	3	11	0	4	1	0	4	2	0	4	4
7½	0	3	11	0	4	0	0	4	2	0	4	4	0	4	6
7⅔	0	4	0	0	4	2	0	4	4	0	4	6	0	4	8
8	0	4	2	0	4	4	0	4	6	0	4	8	0	4	10
8½	0	4	4	0	4	6	0	4	8	0	4	10	0	5	0
8⅔	0	4	5	0	4	7	0	4	9	0	4	11	0	5	1
9	0	4	7	0	4	9	0	4	11	0	5	1	0	5	3
9½	0	4	8	0	4	11	0	5	1	0	5	3	0	5	5
9⅔	0	4	10	0	5	0	0	5	3	0	5	5	0	5	7
10	0	5	0	0	5	2	0	5	4	0	5	7	0	5	9
10½	0	5	1	0	5	4	0	5	6	0	5	8	0	5	11
10⅔	0	5	3	0	5	5	0	5	8	0	5	10	0	6	1
11	0	5	5	0	5	7	0	5	10	0	6	0	0	6	3
11½	0	5	6	0	5	9	0	5	11	0	6	2	0	6	4
11⅔	0	5	8	0	5	10	0	6	1	0	6	4	0	6	6
12	0	5	9	0	6	0	0	6	3	0	6	5	0	6	8
12½	0	5	11	0	6	2	0	6	5	0	6	7	0	6	10
12⅔	0	6	1	0	6	3	0	6	6	0	6	9	0	7	0
13	0	6	2	0	6	5	0	6	8	0	6	11	0	7	2
13½	0	6	4	0	6	7	0	6	10	0	7	1	0	7	4
13⅔	0	6	6	0	6	9	0	7	0	0	7	3	0	7	6
14	0	6	7	0	6	10	0	7	1	0	7	4	0	7	7
14½	0	6	9	0	7	0	0	7	3	0	7	6	0	7	9
14⅔	0	6	10	0	7	2	0	7	5	0	7	8	0	7	11
15	0	7	0	0	7	3	0	7	7	0	7	10	0	8	1
15½	0	7	2	0	7	5	0	7	8	0	8	0	0	8	3
15⅔	0	7	3	0	7	7	0	7	10	0	8	1	0	8	5
16	0	7	5	0	7	8	0	8	0	0	8	3	0	8	7
16½	0	7	7	0	7	10	0	8	2	0	8	5	0	8	9
16⅔	0	7	8	0	8	0	0	8	3	0	8	7	0	8	10
17	0	7	10	0	8	1	0	8	5	0	8	9	0	9	0
17½	0	7	11	0	8	3	0	8	7	0	8	10	0	9	2
18	0	8	1	0	8	5	0	8	9	0	9	0	0	9	4
18½	0	8	3	0	8	6	0	8	10	0	9	2	0	9	6
18⅔	0	8	4	0	8	8	0	9	0	0	9	4	0	9	8
19	0	8	6	0	8	10	0	9	2	0	9	6	0	9	10
19½	0	8	8	0	9	0	0	9	4	0	9	8	0	10	0
19⅔	0	8	9	0	9	1	0	9	5	0	9	9	0	10	1
20	0	8	11	0	9	3	0	9	7	0	9	11	0	10	3
20½	0	9	0	0	9	5	0	9	9	0	10	1	0	10	5
21	0	9	2	0	9	6	0	9	11	0	10	3	0	10	7
21½	0	9	4	0	9	8	0	10	0	0	10	5	0	10	9

Inch Long.	7¾ In. broad.			8 In. broad.			8¼ In. broad.			8½ In. broad.			8¾ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In	Pts.	Ft.	In.	Pts.
7¼	0	5	0	0	5	2	0	5	3	0	5	5	0	5	7
8	0	5	2	0	5	4	0	5	6	0	5	8	0	5	10
8¼	0	5	3	0	5	6	0	5	8	0	5	10	0	6	0
8½	0	5	5	0	5	8	0	5	10	0	6	0	0	6	2
8¾	0	5	7	0	5	10	0	6	0	0	6	2	0	6	4
9	0	5	9	0	6	0	0	6	2	0	6	4	0	6	6
9¼	0	5	11	0	6	2	0	6	4	0	6	6	0	6	8
9½	0	6	1	0	6	4	0	6	6	0	6	8	0	6	11
9¾	0	6	3	0	6	6	0	6	8	0	6	10	0	7	1
10	0	6	5	0	6	8	0	6	10	0	7	1	0	7	3
10¼	0	6	7	0	6	10	0	7	0	0	7	3	0	7	5
10½	0	6	9	0	7	0	0	7	2	0	7	5	0	7	7
10¾	0	6	11	0	7	2	0	7	4	0	7	7	0	7	10
11	0	7	1	0	7	4	0	7	6	0	7	9	0	8	0
11¼	0	7	3	0	7	6	0	7	8	0	7	11	0	8	2
11½	0	7	5	0	7	8	0	7	10	0	8	1	0	8	4
11¾	0	7	7	0	7	10	0	8	0	0	8	3	0	8	6
12	0	7	9	0	8	0	0	8	3	0	8	6	0	8	9
12¼	0	7	10	0	8	2	0	8	5	0	8	8	0	8	11
12½	0	8	0	0	8	4	0	8	7	0	8	10	0	9	1
12¾	0	8	2	0	8	6	0	8	9	0	9	0	0	9	3
13	0	8	4	0	8	8	0	8	11	0	9	2	0	9	5
13¼	0	8	6	0	8	10	0	9	1	0	9	4	0	9	7
13½	0	8	8	0	9	0	0	9	3	0	9	6	0	9	10
13¾	0	8	10	0	9	2	0	9	5	0	9	8	0	10	0
14	0	9	0	0	9	4	0	9	7	0	9	11	0	10	2
14¼	0	9	2	0	9	6	0	9	9	0	10	1	0	10	4
14½	0	9	4	0	9	8	0	9	11	0	10	3	0	10	6
14¾	0	9	6	0	9	10	0	10	1	0	10	5	0	10	9
15	0	9	8	0	10	0	0	10	3	0	10	7	0	10	11
15¼	0	9	10	0	10	2	0	10	5	0	10	9	0	11	1
15½	0	10	0	0	10	4	0	10	7	0	10	11	0	11	3
15¾	0	10	2	0	10	6	0	10	9	0	11	1	0	11	5
16	0	10	4	0	10	8	0	11	0	0	11	4	0	11	8
16¼	0	10	5	0	10	10	0	11	2	0	11	6	0	11	10
16½	0	10	7	0	11	0	0	11	4	0	11	8	1	0	0
16¾	0	10	9	0	11	2	0	11	6	0	11	10	1	0	2
17	0	10	11	0	11	4	0	11	8	1	0	0	1	0	4
17¼	0	11	1	0	11	6	0	11	10	1	0	2	1	0	6
17½	0	11	3	0	11	8	1	0	0	1	0	4	1	0	9
17¾	0	11	5	0	11	10	1	0	2	1	0	6	1	0	11
18	0	11	7	1	0	0	1	0	4	1	0	9	1	1	1
18¼	0	11	9	1	0	2	1	0	6	1	0	11	1	1	3
18½	0	11	11	1	0	4	1	0	8	1	1	1	1	1	5

Inch Long.	9 In. broad.			9½ In. broad.			9⅔ In. broad.			9¾ In. broad.			10 In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
9	0	6	9	0	6	11	0	7	1	0	7	3	0	7	6
9¼	0	6	11	0	7	1	0	7	3	0	7	6	0	7	8
9½	0	7	1	0	7	3	0	7	6	0	7	8	0	7	11
9¾	0	7	3	0	7	6	0	7	8	0	7	11	0	8	1
10	0	7	6	0	7	8	0	7	11	0	8	1	0	8	4
10¼	0	7	8	0	7	10	0	8	1	0	8	3	0	8	6
10½	0	7	10	0	8	1	0	8	3	0	8	6	0	8	9
10¾	0	8	0	0	8	3	0	8	6	0	8	8	0	8	11
11	0	8	3	0	8	5	0	8	8	0	8	11	0	9	2
11¼	0	8	5	0	8	8	0	8	10	0	9	1	0	9	4
11½	0	8	7	0	8	10	0	9	1	0	9	4	0	9	7
11¾	0	8	9	0	9	0	0	9	3	0	9	6	0	9	9
12	0	9	0	0	9	3	0	9	6	0	9	9	0	10	0
12¼	0	9	2	0	9	5	0	9	8	0	9	11	0	10	2
12½	0	9	4	0	9	7	0	9	10	0	10	1	0	10	5
12¾	0	9	6	0	9	9	0	10	1	0	10	4	0	10	7
13	0	9	9	0	10	0	0	10	3	0	10	6	0	10	10
13¼	0	9	11	0	10	2	0	10	5	0	10	9	0	11	0
13½	0	10	1	0	10	4	0	10	8	0	10	11	0	11	3
13¾	0	10	3	0	10	7	0	10	10	0	11	2	0	11	5
14	0	10	6	0	10	9	0	11	1	0	11	4	0	11	8
14¼	0	10	8	0	10	11	0	11	3	0	11	6	0	11	10
14½	0	10	10	0	11	2	0	11	5	0	11	9	1	0	1
14¾	0	11	0	0	11	4	0	11	8	0	11	11	1	0	3
15	0	11	3	0	11	6	0	11	10	1	0	2	1	0	6
15¼	0	11	5	0	11	9	1	0	0	1	0	4	1	0	8
15½	0	11	7	0	11	11	1	0	3	1	0	7	1	0	11
15¾	0	11	9	1	0	1	1	0	5	1	0	9	1	1	1
16	1	0	0	1	0	4	1	0	8	1	1	0	1	1	4
16¼	1	0	2	1	0	6	1	0	10	1	1	2	1	1	6
16½	1	0	4	1	0	8	1	1	0	1	1	4	1	1	9
16¾	1	0	6	1	0	10	1	1	3	1	1	7	1	1	11
17	1	0	9	1	1	1	1	1	5	1	1	9	1	2	2
17¼	1	0	11	1	1	3	1	1	7	1	2	0	1	2	4
17½	1	1	1	1	1	5	1	1	10	1	2	2	1	2	7
17¾	1	1	3	1	1	8	1	2	0	1	2	5	1	2	9
18	1	1	6	1	1	10	1	2	3	1	2	7	1	3	0
18¼	1	1	8	1	2	0	1	2	5	1	2	9	1	3	2
18½	1	1	10	1	2	3	1	2	7	1	3	0	1	3	5
18¾	1	2	0	1	2	5	1	2	10	1	3	2	1	3	7
19	1	2	3	1	2	7	1	3	0	1	3	5	1	3	10
19¼	1	2	5	1	2	10	1	3	2	1	3	7	1	4	0
19½	1	2	7	1	3	0	1	3	5	1	3	10	1	4	3
19¾	1	2	9	1	3	2	1	3	7	1	4	0	1	4	5

Inch Long.	10¼ In. broad.			10½ In. broad.			10¾ In. broad.			11 In. broad.			11½ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In	Pts	Ft.	In.	Pts.	Ft.	In.	Pts.
10¼	0	8	9	0	8	11	0	9	2	0	9	4	0	9	7
10½	0	8	11	0	9	2	0	9	4	0	9	7	0	9	10
10¾	0	9	2	0	9	4	0	9	7	0	9	10	0	10	0
11	0	9	4	0	9	7	0	9	10	0	10	1	0	10	3
11¼	0	9	7	0	9	10	0	10	0	0	10	3	0	10	6
11½	0	9	9	0	10	0	0	10	3	0	10	6	0	10	9
11¾	0	10	0	0	10	3	0	10	6	0	10	9	0	11	0
12	0	10	3	0	10	6	0	10	9	0	11	0	0	11	3
12¼	0	10	5	0	10	8	0	10	11	0	11	2	0	11	5
12½	0	10	8	0	10	11	0	11	2	0	11	5	0	11	8
12¾	0	10	10	0	11	1	0	11	5	0	11	8	0	11	11
13	0	11	1	0	11	4	0	11	7	0	11	11	1	0	2
13¼	0	11	3	0	11	7	0	11	10	1	0	1	1	0	5
13½	0	11	6	0	11	9	1	0	1	1	0	4	1	0	7
13¾	0	11	8	1	0	0	1	0	3	1	0	7	1	0	10
14	0	11	11	1	0	3	1	0	6	1	0	10	1	1	1
14¼	1	0	2	1	0	5	1	0	9	1	1	0	1	1	4
14½	1	0	4	1	0	8	1	0	11	1	1	3	1	1	7
14¾	1	0	7	1	0	10	1	1	2	1	1	6	1	1	9
15	1	0	9	1	1	1	1	1	5	1	1	9	1	2	0
15¼	1	1	0	1	1	4	1	1	7	1	1	11	1	2	3
15½	1	1	2	1	1	6	1	1	10	1	2	2	1	2	6
15¾	1	1	5	1	1	9	1	2	1	1	2	5	1	2	9
16	1	1	8	1	2	0	1	2	4	1	2	8	1	3	0
16¼	1	1	10	1	2	2	1	2	6	1	2	10	1	3	2
16½	1	2	1	1	2	5	1	2	9	1	3	1	1	3	5
16¾	1	2	3	1	2	7	1	3	0	1	3	4	1	3	8
17	1	2	6	1	2	10	1	3	2	1	3	7	1	3	11
17¼	1	2	8	1	3	1	1	3	5	1	3	9	1	4	2
17½	1	2	11	1	3	3	1	3	8	1	4	0	1	4	4
17¾	1	3	1	1	3	6	1	3	10	1	4	3	1	4	7
18	1	3	4	1	3	9	1	4	1	1	4	6	1	4	10
18¼	1	3	7	1	3	11	1	4	4	1	4	8	1	5	1
18½	1	3	9	1	4	2	1	4	6	1	4	11	1	5	4
18¾	1	4	0	1	4	4	1	4	9	1	5	2	1	5	6
19	1	4	2	1	4	7	1	5	0	1	5	5	1	5	9
19¼	1	4	5	1	4	10	1	5	2	1	5	7	1	6	0
19½	1	4	7	1	5	0	1	5	5	1	5	10	1	6	3
19¾	1	4	10	1	5	3	1	5	8	1	6	1	1	6	6
20	1	5	1	1	5	6	1	5	11	1	6	4	1	6	9
20¼	1	5	3	1	5	8	1	6	1	1	6	6	1	6	11
20½	1	5	6	1	5	11	1	6	4	1	6	9	1	7	2
20¾	1	5	8	1	6	1	1	6	7	1	7	0	1	7	5
21	1	5	11	1	6	4	1	6	9	1	7	3	1	7	8

Inch Long.	11⅓ In. broad.			11⅔ In. broad.			12 In. broad.			12¼ In. broad.			12½ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
11⅓	0	11	0	0	11	3	0	11	6	0	11	8	0	11	11
11⅔	0	11	3	0	11	6	0	11	9	0	11	11	1	0	2
12	0	11	6	0	11	9	1	0	0	1	0	3	1	0	6
12¼	0	11	8	0	11	11	1	0	3	1	0	6	1	0	9
12⅓	0	11	11	1	0	2	1	0	6	1	0	9	1	1	0
12⅔	1	0	2	1	0	5	1	0	9	1	1	0	1	1	3
13	1	0	5	1	0	8	1	1	0	1	1	3	1	1	6
13¼	1	0	8	1	0	11	1	1	3	1	1	6	1	1	9
13⅓	1	0	11	1	1	2	1	1	6	1	1	9	1	2	0
13⅔	1	1	2	1	1	5	1	1	9	1	2	0	1	2	3
14	1	1	5	1	1	8	1	2	0	1	2	3	1	2	7
14¼	1	1	7	1	1	11	1	2	3	1	2	6	1	2	10
14⅓	1	1	10	1	2	2	1	2	6	1	2	9	1	3	1
14⅔	1	2	1	1	2	5	1	2	9	1	3	0	1	3	4
15	1	2	4	1	2	8	1	3	0	1	3	3	1	3	7
15¼	1	2	7	1	2	11	1	3	3	1	3	6	1	3	10
15⅓	1	2	10	1	3	2	1	3	6	1	3	9	1	4	1
15⅔	1	3	1	1	3	5	1	3	9	1	4	0	1	4	4
16	1	3	4	1	3	8	1	4	0	1	4	4	1	4	8
16¼	1	3	6	1	3	10	1	4	3	1	4	7	1	4	11
16⅓	1	3	9	1	4	1	1	4	6	1	4	10	1	5	2
16⅔	1	4	0	1	4	4	1	4	9	1	5	1	1	5	5
17	1	4	3	1	4	7	1	5	0	1	5	4	1	5	8
17¼	1	4	6	1	4	10	1	5	3	1	5	7	1	5	11
17⅓	1	4	9	1	5	1	1	5	6	1	5	10	1	6	2
17⅔	1	5	0	1	5	4	1	5	9	1	6	1	1	6	5
18	1	5	3	1	5	7	1	6	0	1	6	4	1	6	9
18¼	1	5	5	1	5	10	1	6	3	1	6	7	1	7	0
18⅓	1	5	8	1	6	1	1	6	6	1	6	10	1	7	3
18⅔	1	5	11	1	6	4	1	6	9	1	7	1	1	7	6
19	1	6	2	1	6	7	1	7	0	1	7	4	1	7	9
19¼	1	6	5	1	6	10	1	7	3	1	7	7	1	8	0
19⅓	1	6	8	1	7	1	1	7	6	1	7	10	1	8	3
19⅔	1	6	11	1	7	4	1	7	9	1	8	1	1	8	6
20	1	7	2	1	7	7	1	8	0	1	8	5	1	8	10
20¼	1	7	4	1	7	9	1	8	3	1	8	8	1	9	1
20⅓	1	7	7	1	8	0	1	8	6	1	8	11	1	9	4
20⅔	1	7	10	1	8	3	1	8	9	1	9	2	1	9	7
21	1	8	1	1	8	6	1	9	0	1	9	5	1	9	10
21¼	1	8	4	1	8	9	1	9	3	1	9	8	1	10	1
21⅓	1	8	7	1	9	0	1	9	6	1	9	11	1	10	4
21⅔	1	8	10	1	9	3	1	9	9	1	10	2	1	10	7
22	1	9	1	1	9	6	1	10	0	1	10	5	1	10	11
22¼	1	9	3	1	9	9	1	10	3	1	10	8	1	11	2

Inch Long.	12⅞ In. broad.			13 In. broad.			13⅛ In. broad.			13⅓ In. broad.			13⅜ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
12¼	1	1	6	1	1	9	1	2	0	1	2	4	1	2	7
13	1	1	9	1	2	1	1	2	4	1	2	7	1	2	10
13¼	1	2	0	1	2	4	1	2	7	1	2	10	1	3	2
13½	1	2	4	1	2	7	1	2	10	1	3	2	1	3	5
13¾	1	2	7	1	2	10	1	3	2	1	3	5	1	3	9
14	1	2	10	1	3	2	1	3	5	1	3	9	1	4	0
14¼	1	3	1	1	3	5	1	3	8	1	4	0	1	4	3
14½	1	3	4	1	3	8	1	4	0	1	4	3	1	4	7
14¾	1	3	8	1	3	11	1	4	3	1	4	7	1	4	10
15	1	3	11	1	4	3	1	4	6	1	4	10	1	5	2
15¼	1	4	2	1	4	6	1	4	10	1	5	1	1	5	5
15½	1	4	5	1	4	9	1	5	1	1	5	5	1	5	9
15¾	1	4	8	1	5	0	1	5	4	1	5	8	1	6	0
16	1	5	0	1	5	4	1	5	8	1	6	0	1	6	4
16¼	1	5	3	1	5	7	1	5	11	1	6	3	1	6	7
16½	1	5	6	1	5	10	1	6	2	1	6	6	1	6	10
16¾	1	5	9	1	6	1	1	6	5	1	6	10	1	7	2
17	1	6	0	1	6	5	1	6	9	1	7	1	1	7	5
17¼	1	6	3	1	6	8	1	7	0	1	7	4	1	7	9
17½	1	6	7	1	6	11	1	7	3	1	7	8	1	8	0
17¾	1	6	10	1	7	2	1	7	7	1	7	11	1	8	4
18	1	7	1	1	7	6	1	7	10	1	8	3	1	8	7
18¼	1	7	4	1	7	9	1	8	1	1	8	6	1	8	10
18½	1	7	7	1	8	0	1	8	5	1	8	9	1	9	2
18¾	1	7	11	1	8	3	1	8	8	1	9	1	1	9	5
19	1	8	2	1	8	7	1	8	11	1	9	4	1	9	9
19¼	1	8	5	1	8	10	1	9	3	1	9	7	1	10	0
19½	1	8	8	1	9	1	1	9	6	1	9	11	1	10	4
19¾	1	8	11	1	9	4	1	9	9	1	10	2	1	10	7
20	1	9	3	1	9	8	1	10	1	1	10	6	1	10	11
20¼	1	9	6	1	9	11	1	10	4	1	10	9	1	11	2
20½	1	9	9	1	10	2	1	10	7	1	11	0	1	11	5
20¾	1	10	0	1	10	5	1	10	10	1	11	4	1	11	9
21	1	10	3	1	10	9	1	11	2	1	11	7	2	0	0
21¼	1	10	6	1	11	0	1	11	5	1	11	10	2	0	4
21½	1	10	10	1	11	3	1	11	8	2	0	2	2	0	7
21¾	1	11	1	1	11	6	2	0	0	2	0	5	2	0	11
22	1	11	4	1	11	10	2	0	3	2	0	9	2	1	2
22¼	1	11	7	2	0	1	2	0	6	2	1	0	2	1	5
22½	1	11	10	2	0	4	2	0	10	2	1	3	2	1	9
22¾	2	0	2	2	0	7	2	1	1	2	1	7	2	2	0
23	2	0	5	2	0	11	2	1	4	2	1	10	2	2	4
23¼	2	0	8	2	1	2	2	1	8	2	2	1	2	2	7
23½	2	0	11	2	1	5	2	1	11	2	2	5	2	2	11

Inch Long.	14 In. broad.			14⅛ In. broad.			14¼ In. broad.			14⅜ In. broad.			15 In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
14	1	4	4	1	4	7	1	4	11	1	5	2	1	5	6
14⅛	1	4	7	1	4	11	1	5	2	1	5	6	1	5	9
14¼	1	4	11	1	5	2	1	5	6	1	5	9	1	6	1
14⅜	1	5	2	1	5	6	1	5	9	1	6	1	1	6	5
15	1	5	6	1	5	9	1	6	1	1	6	5	1	6	9
15⅛	1	5	9	1	6	1	1	6	5	1	6	8	1	7	0
15¼	1	6	1	1	6	4	1	6	8	1	7	0	1	7	4
15⅜	1	6	4	1	6	8	1	7	0	1	7	4	1	7	8
16	1	6	8	1	7	0	1	7	4	1	7	8	1	8	0
16⅛	1	6	11	1	7	3	1	7	7	1	7	11	1	8	3
16¼	1	7	3	1	7	7	1	7	11	1	8	3	1	8	7
16⅜	1	7	6	1	7	10	1	8	2	1	8	7	1	8	11
17	1	7	10	1	8	2	1	8	6	1	8	10	1	9	3
17⅛	1	8	1	1	8	5	1	8	10	1	9	2	1	9	6
17¼	1	8	5	1	8	9	1	9	1	1	9	6	1	9	10
17⅜	1	8	8	1	9	0	1	9	5	1	9	9	1	10	2
18	1	9	0	1	9	4	1	9	9	1	10	1	1	10	6
18⅛	1	9	3	1	9	8	1	10	0	1	10	5	1	10	9
18¼	1	9	7	1	9	11	1	10	4	1	10	8	1	11	1
18⅜	1	9	10	1	10	3	1	10	7	1	11	0	1	11	5
19	1	10	2	1	10	6	1	10	11	1	11	4	1	11	9
19⅛	1	10	5	1	10	10	1	11	3	1	11	7	2	0	0
19¼	1	10	9	1	11	1	1	11	6	1	11	11	2	0	4
19⅜	1	11	0	1	11	5	1	11	10	2	0	3	2	0	8
20	1	11	4	1	11	9	2	0	2	2	0	7	2	1	0
20⅛	1	11	7	2	0	0	2	0	5	2	0	10	2	1	3
20¼	1	11	11	2	0	4	2	0	9	2	1	2	2	1	7
20⅜	2	0	2	2	0	7	2	1	0	2	1	6	2	1	11
21	2	0	6	2	0	11	2	1	4	2	1	9	2	2	3
21⅛	2	0	9	2	1	2	2	1	8	2	2	1	2	2	6
21¼	2	1	1	2	1	6	2	1	11	2	2	5	2	2	10
21⅜	2	1	4	2	1	9	2	2	3	2	2	8	2	3	2
22	2	1	8	2	2	1	2	2	7	2	3	0	2	3	6
22⅛	2	1	11	2	2	5	2	2	10	2	3	4	2	3	9
22¼	2	2	3	2	2	8	2	3	2	2	3	7	2	4	1
22⅜	2	2	6	2	3	0	2	3	5	2	3	11	2	4	5
23	2	2	10	2	3	3	2	3	9	2	4	3	2	4	9
23⅛	2	3	1	2	3	7	2	4	1	2	4	6	2	5	0
23¼	2	3	5	2	3	10	2	4	4	2	4	10	2	5	4
23⅜	2	3	8	2	4	2	2	4	8	2	5	2	2	5	8
24	2	4	0	2	4	6	2	5	0	2	5	6	2	6	0
24⅛	2	4	3	2	4	9	2	5	3	2	5	9	2	6	3
24¼	2	4	7	2	5	1	2	5	7	2	6	1	2	6	7
24⅜	2	4	10	2	5	4	2	5	10	2	6	5	2	6	11

Inch Long.	15¼ In. broad.			15½ In. broad.			15¾ In. broad.			16 In. broad.			16¼ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
15¼	1	7	4	1	7	8	1	8	0	1	8	4	1	8	7
15½	1	7	8	1	8	0	1	8	4	1	8	8	1	8	11
15¾	1	8	0	1	8	4	1	8	8	1	9	0	1	9	3
16	1	8	4	1	8	8	1	9	0	1	9	4	1	9	8
16¼	1	8	7	1	8	11	1	9	3	1	9	8	1	10	0
16½	1	8	11	1	9	3	1	9	7	1	10	0	1	10	4
16¾	1	9	3	1	9	7	1	9	11	1	10	4	1	10	8
17	1	9	7	1	9	11	1	10	3	1	10	8	1	11	0
17¼	1	9	11	1	10	3	1	10	7	1	11	0	1	11	4
17½	1	10	2	1	10	7	1	10	11	1	11	4	1	11	8
17¾	1	10	6	1	10	11	1	11	3	1	11	8	2	0	0
18	1	10	10	1	11	3	1	11	7	2	0	0	2	0	4
18¼	1	11	2	1	11	6	1	11	11	2	0	4	2	0	8
18½	1	11	6	1	11	10	2	0	3	2	0	8	2	1	0
18¾	1	11	9	2	0	2	2	0	7	2	1	0	2	1	4
19	2	0	1	2	0	6	2	0	11	2	1	4	2	1	8
19¼	2	0	5	2	0	10	2	1	3	2	1	8	2	2	0
19½	2	0	9	2	1	2	2	1	7	2	2	0	2	2	4
19¾	2	1	1	2	1	6	2	1	11	2	2	4	2	2	8
20	2	1	5	2	1	10	2	2	3	2	2	8	2	3	1
20¼	2	1	8	2	2	1	2	2	6	2	3	0	2	3	5
20½	2	2	0	2	2	5	2	2	10	2	3	4	2	3	9
20¾	2	2	4	2	2	9	2	3	2	2	3	8	2	4	1
21	2	2	8	2	3	1	2	3	6	2	4	0	2	4	5
21¼	2	3	0	2	3	5	2	3	10	2	4	4	2	4	9
21½	2	3	3	2	3	9	2	4	2	2	4	8	2	5	1
21¾	2	3	7	2	4	1	2	4	6	2	5	0	2	5	5
22	2	3	11	2	4	5	2	4	10	2	5	4	2	5	9
22¼	2	4	3	2	4	8	2	5	2	2	5	8	2	6	1
22½	2	4	7	2	5	0	2	5	6	2	6	0	2	6	5
22¾	2	4	10	2	5	4	2	5	10	2	6	4	2	6	9
23	2	5	2	2	5	8	2	6	2	2	6	8	2	7	1
23¼	2	5	6	2	6	0	2	6	6	2	7	0	2	7	5
23½	2	5	10	2	6	4	2	6	10	2	7	4	2	7	9
23¾	2	6	2	2	6	8	2	7	2	2	7	8	2	8	1
24	2	6	6	2	7	0	2	7	6	2	8	0	2	8	6
24¼	2	6	9	2	7	3	2	7	9	2	8	4	2	8	10
24½	2	7	1	2	7	7	2	8	1	2	8	8	2	9	2
24¾	2	7	5	2	7	11	2	8	5	2	9	0	2	9	6
25	2	7	9	2	8	3	2	8	9	2	9	4	2	9	10
25¼	2	8	1	2	8	7	2	9	1	2	9	8	2	10	2
25½	2	8	4	2	8	11	2	9	5	2	10	0	2	10	6
25¾	2	8	8	2	9	3	2	9	9	2	10	4	2	10	10
26	2	9	0	2	9	7	2	10	1	2	10	8	2	11	2

Inch Long.	16⅜ In. broad.			16¾ In. broad.			17 In. broad.			17¼ In. broad.			17½ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts	Ft.	In.	Pts	Ft.	In.	Pts.
16½	1	10	8	1	11	0	1	11	4	1	11	8	2	0	0
16¾	1	11	0	1	11	4	1	11	8	2	0	0	2	0	5
17	1	11	4	1	11	8	2	0	1	2	0	5	2	0	9
17¼	1	11	8	2	0	0	2	0	5	2	0	9	2	1	1
17½	2	0	0	2	0	5	2	0	9	2	1	1	2	1	6
17¾	2	0	4	2	0	9	2	1	1	2	1	6	2	1	10
18	2	0	9	2	1	1	2	1	6	2	1	10	2	2	3
18¼	2	1	1	2	1	5	2	1	10	2	2	2	2	2	7
18½	2	1	5	2	1	9	2	2	2	2	2	7	2	2	11
18¾	2	1	9	2	2	2	2	2	6	2	2	11	2	3	4
19	2	2	1	2	2	6	2	2	11	2	3	3	2	3	8
19¼	2	2	5	2	2	10	2	3	3	2	3	8	2	4	0
19½	2	2	9	2	3	2	2	3	7	2	4	0	2	4	5
19¾	2	3	1	2	3	6	2	3	11	2	4	4	2	4	9
20	2	3	6	2	3	11	2	4	4	2	4	9	2	5	2
20¼	2	3	10	2	4	3	2	4	8	2	5	1	2	5	6
20½	2	4	2	2	4	7	2	5	0	2	5	5	2	5	10
20¾	2	4	6	2	4	11	2	5	4	2	5	9	2	6	3
21	2	4	10	2	5	3	2	5	9	2	6	2	2	6	7
21¼	2	5	2	2	5	7	2	6	1	2	6	6	2	6	11
21½	2	5	6	2	6	0	2	6	5	2	6	10	2	7	4
21¾	2	5	10	2	6	4	2	6	9	2	7	3	2	7	8
22	2	6	3	2	6	8	2	7	2	2	7	7	2	8	1
22¼	2	6	7	2	7	0	2	7	6	2	7	11	2	8	5
22½	2	6	11	2	7	4	2	7	10	2	8	4	2	8	9
22¾	2	7	3	2	7	9	2	8	2	2	8	8	2	9	2
23	2	7	7	2	8	1	2	8	7	2	9	0	2	9	6
23¼	2	7	11	2	8	5	2	8	11	2	9	5	2	9	10
23½	2	8	3	2	8	9	2	9	3	2	9	9	2	10	3
23¾	2	8	7	2	9	1	2	9	7	2	10	1	2	10	7
24	2	9	0	2	9	6	2	10	0	2	10	6	2	11	0
24¼	2	9	4	2	9	10	2	10	4	2	10	10	2	11	4
24½	2	9	8	2	10	2	2	10	8	2	11	2	2	11	8
24¾	2	10	0	2	10	6	2	11	0	2	11	6	3	0	1
25	2	10	4	2	10	10	2	11	5	2	11	11	3	0	5
25¼	2	10	8	2	11	2	2	11	9	3	0	3	3	0	9
25½	2	11	0	2	11	7	3	0	1	3	0	7	3	1	2
25¾	2	11	4	2	11	11	3	0	5	3	1	0	3	1	6
26	2	11	9	3	0	3	3	0	10	3	1	4	3	1	11
26¼	3	0	1	3	0	7	3	1	2	3	1	8	3	2	3
26½	3	0	5	3	0	11	3	1	6	3	2	1	3	2	7
26¾	3	0	9	3	1	4	3	1	10	3	2	5	3	3	0
27	3	1	1	3	1	8	3	2	3	3	2	9	3	3	4
27¼	3	1	5	3	2	0	3	2	7	3	3	2	3	3	8

Inch Long.	17¾ In. broad.			18 In. broad.			18¼ In. broad.			18⅓ In. broad.			18¾ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
17¾	2	2	3	2	2	7	2	2	11	2	3	4	2	3	8
18	2	2	7	2	3	0	2	3	4	2	3	9	2	4	1
18¼	2	2	11	2	3	4	2	3	9	2	4	1	2	4	6
18⅓	2	3	4	2	3	9	2	4	1	2	4	6	2	4	10
18¾	2	3	8	2	4	1	2	4	6	2	4	10	2	5	3
19	2	4	1	2	4	6	2	4	10	2	5	3	2	5	8
19¼	2	4	5	2	4	10	2	5	3	2	5	8	2	6	0
19⅓	2	4	10	2	5	3	2	5	7	2	6	0	2	6	5
19¾	2	5	2	2	5	7	2	6	0	2	6	5	2	6	10
20	2	5	7	2	6	0	2	6	5	2	6	10	2	7	3
20¼	2	5	11	2	6	4	2	6	9	2	7	2	2	7	7
20⅓	2	6	3	2	6	9	2	7	2	2	7	7	2	8	0
20¾	2	6	8	2	7	1	2	7	6	2	7	11	2	8	5
21	2	7	0	2	7	6	2	7	11	2	8	4	2	8	9
21¼	2	7	5	2	7	10	2	8	3	2	8	9	2	9	2
21⅓	2	7	9	2	8	3	2	8	8	2	9	1	2	9	7
21¾	2	8	2	2	8	7	2	9	0	2	9	6	2	9	11
22	2	8	6	2	9	0	2	9	5	2	9	11	2	10	4
22¼	2	8	10	2	9	4	2	9	10	2	10	3	2	10	9
22⅓	2	9	3	2	9	9	2	10	2	2	10	8	2	11	1
22¾	2	9	7	2	10	1	2	10	7	2	11	0	2	11	6
23	2	10	0	2	10	6	2	10	11	2	11	5	2	11	11
23¼	2	10	4	2	10	10	2	11	4	2	11	10	3	0	3
23⅓	2	10	9	2	11	3	2	11	8	3	0	2	3	0	8
23¾	2	11	1	2	11	7	3	0	1	3	0	7	3	1	1
24	2	11	6	3	0	0	3	0	6	3	1	0	3	1	6
24¼	2	11	10	3	0	4	3	0	10	3	1	4	3	1	10
24⅓	3	0	2	3	0	9	3	1	3	3	1	9	3	2	3
24¾	3	0	7	3	1	1	3	1	7	3	2	1	3	2	8
25	3	0	11	3	1	6	3	2	0	3	2	6	3	3	0
25¼	3	1	4	3	1	10	3	2	4	3	2	11	3	3	5
25⅓	3	1	8	3	2	3	3	2	9	3	3	3	3	3	10
25¾	3	2	1	3	2	7	3	3	1	3	3	8	3	4	2
26	3	2	5	3	3	0	3	3	6	3	4	1	3	4	7
26¼	3	2	9	3	3	4	3	3	11	3	4	5	3	5	0
26⅓	3	3	2	3	3	9	3	4	3	3	4	10	3	5	4
26¾	3	3	6	3	4	1	3	4	8	3	5	2	3	5	9
27	3	3	11	3	4	6	3	5	0	3	5	7	3	6	2
27¼	3	4	3	3	4	10	3	5	5	3	6	0	3	6	6
27⅓	3	4	8	3	5	3	3	5	9	3	6	4	3	6	11
27¾	3	5	0	3	5	7	3	6	2	3	6	9	3	7	4
28	3	5	5	3	6	0	3	6	7	3	7	2	3	7	9
28¼	3	5	9	3	6	4	3	6	11	3	7	6	3	8	1
28½	3	6	1	3	6	9	3	7	4	3	7	11	3	8	6

Inch Long.	19 In. broad.			19¼ In. broad.			19½ In. broad.			19¾ In. broad.			20 In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
19	2	6	1	2	6	5	2	6	10	2	7	3	2	7	8
19¼	2	6	5	2	6	10	2	7	3	2	7	8	2	8	1
19½	2	6	10	2	7	3	2	7	8	2	8	1	2	8	6
19¾	2	7	3	2	7	8	2	8	1	2	8	6	2	8	11
20	2	7	8	2	8	1	2	8	6	2	8	11	2	9	4
20¼	2	8	0	2	8	5	2	8	10	2	9	3	2	9	9
20½	2	8	5	2	8	10	2	9	3	2	9	8	2	10	2
20¾	2	8	10	2	9	3	2	9	8	2	10	1	2	10	7
21	2	9	3	2	9	8	2	10	1	2	10	6	2	11	0
21¼	2	9	7	2	10	1	2	10	6	2	10	11	2	11	5
21½	2	10	0	2	10	5	2	10	11	2	11	4	2	11	10
21¾	2	10	5	2	10	10	2	11	4	2	11	9	3	0	3
22	2	10	10	2	11	3	2	11	9	3	0	2	3	0	8
22¼	2	11	2	2	11	8	3	0	1	3	0	7	3	1	1
22½	2	11	7	3	0	1	3	0	6	3	1	0	3	1	6
22¾	3	0	0	3	0	5	3	0	11	3	1	5	3	1	11
23	3	0	5	3	0	10	3	1	4	3	1	10	3	2	4
23¼	3	0	9	3	1	3	3	1	9	3	2	3	3	2	9
23½	3	1	2	3	1	8	3	2	2	3	2	8	3	3	2
23¾	3	1	7	3	2	1	3	2	7	3	3	1	3	3	7
24	3	2	0	3	2	6	3	3	0	3	3	6	3	4	0
24¼	3	2	4	3	2	10	3	3	4	3	3	10	3	4	5
24½	3	2	9	3	3	3	3	3	9	3	4	3	3	4	10
24¾	3	3	2	3	3	8	3	4	2	3	4	8	3	5	3
25	3	3	7	3	4	1	3	4	7	3	5	1	3	5	8
25¼	3	3	11	3	4	6	3	5	0	3	5	6	3	6	1
25½	3	4	4	3	4	10	3	5	5	3	5	11	3	6	6
25¾	3	4	9	3	5	3	3	5	10	3	6	4	3	6	11
26	3	5	2	3	5	8	3	6	3	3	6	9	3	7	4
26¼	3	5	6	3	6	1	3	6	7	3	7	2	3	7	9
26½	3	5	11	3	6	6	3	7	0	3	7	7	3	8	2
26¾	3	6	4	3	6	10	3	7	5	3	8	0	3	8	7
27	3	6	9	3	7	3	3	7	10	3	8	5	3	9	0
27¼	3	7	1	3	7	8	3	8	3	3	8	10	3	9	5
27½	3	7	6	3	8	1	3	8	8	3	9	3	3	9	10
27¾	3	7	11	3	8	6	3	9	1	3	9	8	3	10	3
28	3	8	4	3	8	11	3	9	6	3	10	1	3	10	8
28¼	3	8	8	3	9	3	3	9	10	3	10	5	3	11	1
28½	3	9	1	3	9	8	3	10	3	3	10	10	3	11	6
28¾	3	9	6	3	10	1	3	10	8	3	11	3	3	11	11
29	3	9	11	3	10	6	3	11	1	3	11	8	4	0	4
29¼	3	10	3	3	10	11	3	11	6	4	0	1	4	0	9
29½	3	10	8	3	11	3	3	11	11	4	0	6	4	1	2
29¾	3	11	1	3	11	8	4	0	4	4	0	11	4	1	7

Inch Long.	20½ In. broad.			20⅔ In. broad.			20⅚ In. broad.			21 In. broad.			21⅓ In. broad.		
	Ft.	In.	Pts	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts	Ft.	In.	Pts.
20¼	2	10	2	2	10	7	2	11	0	2	11	5	2	11	10
20⅓	2	10	7	2	11	0	2	11	5	2	11	10	3	0	3
20¾	2	11	0	2	11	5	2	11	10	3	0	3	3	0	8
21	2	11	5	2	11	10	3	0	3	3	0	9	3	1	2
21¼	2	11	10	3	0	3	3	0	8	3	1	2	3	1	7
21⅓	3	0	3	3	0	8	3	1	2	3	1	7	3	2	0
21¾	3	0	8	3	1	1	3	1	7	3	2	0	3	2	6
22	3	1	1	3	1	7	3	2	0	3	2	6	3	2	11
22¼	3	1	6	3	2	0	3	2	5	3	2	11	3	3	4
22⅓	3	1	11	3	2	5	3	2	10	3	3	4	3	3	10
22¾	3	2	4	3	2	10	3	3	4	3	3	9	3	4	3
23	3	2	9	3	3	3	3	3	9	3	4	3	3	4	8
23¼	3	3	2	3	3	8	3	4	2	3	4	8	3	5	2
23⅓	3	3	7	3	4	1	3	4	7	3	5	1	3	5	7
23¾	3	4	0	3	4	6	3	5	0	3	5	6	3	6	0
24	3	4	6	3	5	0	3	5	6	3	6	0	3	6	6
24¼	3	4	11	3	5	5	3	5	11	3	6	5	3	6	11
24⅓	3	5	4	3	5	10	3	6	4	3	6	10	3	7	4
24¾	3	5	9	3	6	3	3	6	9	3	7	3	3	7	9
25	3	6	2	3	6	8	3	7	2	3	7	9	3	8	3
25¼	3	6	7	3	7	1	3	7	7	3	8	2	3	8	8
25⅓	3	7	0	3	7	6	3	8	1	3	8	7	3	9	1
25¾	3	7	5	3	7	11	3	8	6	3	9	0	3	9	7
26	3	7	10	3	8	5	3	8	11	3	9	6	3	10	0
26¼	3	8	3	3	8	10	3	9	4	3	9	11	3	10	5
26⅓	3	8	8	3	9	3	3	9	9	3	10	4	3	10	11
26¾	3	9	1	3	9	8	3	10	3	3	10	9	3	11	4
27	3	9	6	3	10	1	3	10	8	3	11	3	3	11	9
27¼	3	9	11	3	10	6	3	11	1	3	11	8	4	0	3
27⅓	3	10	4	3	10	11	3	11	6	4	0	1	4	0	8
27¾	3	10	9	3	11	4	3	11	11	4	0	6	4	1	1
28	3	11	3	3	11	10	4	0	5	4	1	0	4	1	7
28¼	3	11	8	4	0	3	4	0	10	4	1	5	4	2	0
28⅓	4	0	1	4	0	8	4	1	3	4	1	10	4	2	5
28¾	4	0	6	4	1	1	4	1	8	4	2	3	4	2	10
29	4	0	11	4	1	6	4	2	1	4	2	9	4	3	4
29¼	4	1	4	4	1	11	4	2	6	4	3	2	4	3	9
29⅓	4	1	9	4	2	4	4	3	0	4	3	7	4	4	2
29¾	4	2	2	4	2	9	4	3	5	4	4	0	4	4	8
30	4	2	7	4	3	3	4	3	10	4	4	6	4	5	1
30¼	4	3	0	4	3	8	4	4	3	4	4	11	4	5	6
30⅓	4	3	5	4	4	1	4	4	8	4	5	4	4	6	0
30¾	4	3	10	4	4	6	4	5	2	4	5	9	4	6	5
31	4	4	3	4	4	11	4	5	7	4	6	3	4	6	10

Inch Long.	21⅛ In. broad.			21¼ In. broad.			22 In. broad.			22⅛ In. broad.			22⅓ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
21½	3	2	6	3	2	11	3	3	5	3	3	10	3	4	3
21⅝	3	2	11	3	3	5	3	3	10	3	4	3	3	4	9
22	3	3	5	3	3	10	3	4	4	3	4	9	3	5	3
22⅛	3	3	10	3	4	3	3	4	9	3	5	3	3	5	8
22¼	3	4	3	3	4	9	3	5	3	3	5	8	3	6	2
22⅜	3	4	9	3	5	2	3	5	8	3	6	2	3	6	7
23	3	5	2	3	5	8	3	6	2	3	6	7	3	7	1
23⅛	3	5	7	3	6	1	3	6	7	3	7	1	3	7	7
23¼	3	6	1	3	6	7	3	7	1	3	7	6	3	8	0
23⅜	3	6	6	3	7	0	3	7	6	3	8	0	3	8	6
24	3	7	0	3	7	6	3	8	0	3	8	6	3	9	0
24⅛	3	7	5	3	7	11	3	8	5	3	8	11	3	9	5
24¼	3	7	10	3	8	4	3	8	11	3	9	5	3	9	11
24⅜	3	8	4	3	8	10	3	9	4	3	9	10	3	10	4
25	3	8	9	3	9	3	3	9	10	3	10	4	3	10	10
25⅛	3	9	2	3	9	9	3	10	3	3	10	9	3	11	4
25¼	3	9	8	3	10	2	3	10	9	3	11	3	3	11	9
25⅜	3	10	1	3	10	8	3	11	2	3	11	8	4	0	3
26	3	10	7	3	11	1	3	11	8	4	0	2	4	0	9
26⅛	3	11	0	3	11	6	4	0	1	4	0	8	4	1	2
26¼	3	11	5	4	0	0	4	0	7	4	1	1	4	1	8
26⅜	3	11	11	4	0	5	4	1	0	4	1	7	4	2	1
27	4	0	4	4	0	11	4	1	6	4	2	0	4	2	7
27⅛	4	0	9	4	1	4	4	1	11	4	2	6	4	3	1
27¼	4	1	3	4	1	10	4	2	5	4	2	11	4	3	6
27⅜	4	1	8	4	2	3	4	2	10	4	3	5	4	4	0
28	4	2	2	4	2	9	4	3	4	4	3	11	4	4	6
28⅛	4	2	7	4	3	2	4	3	9	4	4	4	4	4	11
28¼	4	3	0	4	3	7	4	4	3	4	4	10	4	5	5
28⅜	4	3	6	4	4	1	4	4	8	4	5	3	4	5	10
29	4	3	11	4	4	6	4	5	2	4	5	9	4	6	4
29⅛	4	4	4	4	5	0	4	5	7	4	6	2	4	6	10
29¼	4	4	10	4	5	5	4	6	1	4	6	8	4	7	3
29⅜	4	5	3	4	5	11	4	6	6	4	7	1	4	7	9
30	4	5	9	4	6	4	4	7	0	4	7	7	4	8	3
30⅛	4	6	2	4	6	9	4	7	5	4	8	1	4	8	8
30¼	4	6	7	4	7	3	4	7	11	4	8	6	4	9	2
30⅜	4	7	1	4	7	8	4	8	4	4	9	0	4	9	7
31	4	7	6	4	8	2	4	8	10	4	9	5	4	10	1
31⅛	4	7	11	4	8	7	4	9	3	4	9	11	4	10	7
31¼	4	8	5	4	9	1	4	9	9	4	10	4	4	11	0
31⅜	4	8	10	4	9	6	4	10	2	4	10	10	4	11	6
32	4	9	4	4	10	0	4	10	8	4	11	4	5	0	0
32⅛	4	9	9	4	10	5	4	11	1	4	11	9	5	0	5

Inch Long.	22⅝ In. broad.			23 In. broad.			23⅛ In. broad.			23¼ In. broad.			23⅜ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
22⅝	3	7	1	3	7	7	3	8	1	3	8	6	3	9	0
23	3	7	7	3	8	1	3	8	6	3	9	0	3	9	6
23⅛	3	8	0	3	8	6	3	9	0	3	9	6	3	10	0
23¼	3	8	6	3	9	0	3	9	6	3	10	0	3	10	6
23⅜	3	9	0	3	9	6	3	10	0	3	10	6	3	11	0
24	3	9	6	3	10	0	3	10	6	3	11	0	3	11	6
24⅛	3	9	11	3	10	5	3	10	11	3	11	5	3	11	11
24¼	3	10	5	3	10	11	3	11	5	3	11	11	4	0	5
24⅜	3	10	11	3	11	5	3	11	11	4	0	5	4	0	11
25	3	11	4	3	11	11	4	0	5	4	0	11	4	1	5
25⅛	3	11	10	4	0	4	4	0	11	4	1	5	4	1	11
25¼	4	0	4	4	0	10	4	1	4	4	1	11	4	2	5
25⅜	4	0	9	4	1	4	4	1	10	4	2	5	4	2	11
26	4	1	3	4	1	10	4	2	4	4	2	11	4	3	5
26⅛	4	1	9	4	2	3	4	2	10	4	3	4	4	3	11
26¼	4	2	2	4	2	9	4	3	4	4	3	10	4	4	5
26⅜	4	2	8	4	3	3	4	3	9	4	4	4	4	4	11
27	4	3	2	4	3	9	4	4	3	4	4	10	4	5	5
27⅛	4	3	7	4	4	2	4	4	9	4	5	4	4	5	11
27¼	4	4	1	4	4	8	4	5	3	4	5	10	4	6	5
27⅜	4	4	7	4	5	2	4	5	9	4	6	4	4	6	11
28	4	5	1	4	5	8	4	6	3	4	6	10	4	7	5
28⅛	4	5	6	4	6	1	4	6	8	4	7	3	4	7	10
28¼	4	6	0	4	6	7	4	7	2	4	7	9	4	8	4
28⅜	4	6	6	4	7	1	4	7	8	4	8	3	4	8	10
29	4	6	11	4	7	7	4	8	2	4	8	9	4	9	4
29⅛	4	7	5	4	8	0	4	8	8	4	9	3	4	9	10
29¼	4	7	11	4	8	6	4	9	1	4	9	9	4	10	4
29⅜	4	8	4	4	9	0	4	9	7	4	10	3	4	10	10
30	4	8	10	4	9	6	4	10	1	4	10	9	4	11	4
30⅛	4	9	4	4	9	11	4	10	7	4	11	2	4	11	10
30¼	4	9	9	4	10	5	4	11	1	4	11	8	5	0	4
30⅜	4	10	3	4	10	11	4	11	6	5	0	2	5	0	10
31	4	10	9	4	11	5	5	0	0	5	0	8	5	1	4
31⅛	4	11	2	4	11	10	5	0	6	5	1	2	5	1	10
31¼	4	11	8	5	0	4	5	1	0	5	1	8	5	2	4
31⅜	5	0	2	5	0	10	5	1	6	5	2	2	5	2	10
32	5	0	8	5	1	4	5	2	0	5	2	8	5	3	4
32⅛	5	1	1	5	1	9	5	2	5	5	3	1	5	3	9
32¼	5	1	7	5	2	3	5	2	11	5	3	7	5	4	3
32⅜	5	2	1	5	2	9	5	3	5	5	4	1	5	4	9
33	5	2	6	5	3	3	5	3	11	5	4	7	5	5	3
33⅛	5	3	0	5	3	8	5	4	5	5	5	1	5	5	9
33¼	5	3	6	5	4	2	5	4	10	5	5	7	5	6	3

Inch Long.	24 In. broad.			24¼ In. broad.			24½ In. broad.			24¾ In. broad.			25 In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
24	4	0	0	4	0	6	4	1	0	4	1	6	4	2	0
24¼	4	0	6	4	1	0	4	1	6	4	2	0	4	2	6
24½	4	1	0	4	1	6	4	2	0	4	2	6	4	3	0
24¾	4	1	6	4	2	0	4	2	6	4	3	0	4	3	6
25	4	2	0	4	2	6	4	3	0	4	3	6	4	4	1
25¼	4	2	6	4	3	0	4	3	6	4	4	0	4	4	7
25½	4	3	0	4	3	6	4	4	0	4	4	7	4	5	1
25¾	4	3	6	4	4	0	4	4	6	4	5	1	4	5	7
26	4	4	0	4	4	6	4	5	1	4	5	7	4	6	2
26¼	4	4	6	4	5	0	4	5	7	4	6	1	4	6	8
26½	4	5	0	4	5	6	4	6	1	4	6	7	4	7	2
26¾	4	5	6	4	6	0	4	6	7	4	7	2	4	7	8
27	4	6	0	4	6	6	4	7	1	4	7	8	4	8	3
27¼	4	6	6	4	7	0	4	7	7	4	8	2	4	8	9
27½	4	7	0	4	7	6	4	8	1	4	8	8	4	9	3
27¾	4	7	6	4	8	0	4	8	7	4	9	2	4	9	9
28	4	8	0	4	8	7	4	9	2	4	9	9	4	10	4
28¼	4	8	6	4	9	1	4	9	8	4	10	3	4	10	10
28½	4	9	0	4	9	7	4	10	2	4	10	9	4	11	4
28¾	4	9	6	4	10	1	4	10	8	4	11	3	4	11	10
29	4	10	0	4	10	7	4	11	2	4	11	9	5	0	5
29¼	4	10	6	4	11	1	4	11	8	5	0	3	5	0	11
29½	4	11	0	4	11	7	5	0	2	5	0	10	5	1	5
29¾	4	11	6	5	0	1	5	0	8	5	1	4	5	1	11
30	5	0	0	5	0	7	5	1	3	5	1	10	5	2	6
30¼	5	0	6	5	1	1	5	1	9	5	2	4	5	3	0
30½	5	1	0	5	1	7	5	2	3	5	2	10	5	3	6
30¾	5	1	6	5	2	1	5	2	9	5	3	5	5	4	0
31	5	2	0	5	2	7	5	3	3	5	3	11	5	4	7
31¼	5	2	6	5	3	1	5	3	9	5	4	5	5	5	1
31½	5	3	0	5	3	7	5	4	3	5	4	11	5	5	7
31¾	5	3	6	5	4	1	5	4	9	5	5	5	5	6	1
32	5	4	0	5	4	8	5	5	4	5	6	0	5	6	8
32¼	5	4	6	5	5	2	5	5	10	5	6	6	5	7	2
32½	5	5	0	5	5	8	5	6	4	5	7	0	5	7	8
32¾	5	5	6	5	6	2	5	6	10	5	7	6	5	8	2
33	5	6	0	5	6	8	5	7	4	5	8	0	5	8	9
33¼	5	6	6	5	7	2	5	7	10	5	8	6	5	9	3
33½	5	7	0	5	7	8	5	8	4	5	9	1	5	9	9
33¾	5	7	6	5	8	2	5	8	10	5	9	7	5	10	3
34	5	8	0	5	8	8	5	9	5	5	10	1	5	10	10
34¼	5	8	6	5	9	2	5	9	11	5	10	7	5	11	4
34½	5	9	0	5	9	8	5	10	5	5	11	1	5	11	10
34¾	5	9	6	5	10	2	5	10	11	5	11	8	6	0	4

Inch Long.	25⅓ In. broad.			25½ In. broad.			25⅔ In. broad.			26 In. broad.			26¼ In. broad.		
	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.	Ft.	In.	Pts.
25¼	4	5	1	4	5	7	4	6	2	4	6	8	4	7	3
25½	4	5	7	4	6	2	4	6	8	4	7	3	4	7	9
25¾	4	6	2	4	6	8	4	7	3	4	7	9	4	8	3
26	4	6	8	4	7	3	4	7	9	4	8	4	4	8	10
26¼	4	7	2	4	7	9	4	8	3	4	8	10	4	9	5
26½	4	7	9	4	8	3	4	8	10	4	9	5	4	9	11
26¾	4	8	3	4	8	10	4	9	4	4	9	11	4	10	6
27	4	8	9	4	9	4	4	9	11	4	10	6	4	11	0
27¼	4	9	4	4	9	10	4	10	5	4	11	0	4	11	7
27½	4	9	10	4	10	5	4	11	0	4	11	7	5	0	1
27¾	4	10	4	4	10	11	4	11	6	5	0	1	5	0	8
28	4	10	11	4	11	6	5	0	1	5	0	8	5	1	3
28¼	4	11	5	5	0	0	5	0	7	5	1	2	5	1	9
28½	4	11	11	5	0	6	5	1	1	5	1	9	5	2	4
28¾	5	0	5	5	1	1	5	1	8	5	2	3	5	2	10
29	5	1	0	5	1	7	5	2	2	5	2	10	5	3	5
29¼	5	1	6	5	2	1	5	2	9	5	3	4	5	3	11
29½	5	2	0	5	2	8	5	3	3	5	3	11	5	4	6
29¾	5	2	7	5	3	2	5	3	10	5	4	5	5	5	0
30	5	3	1	5	3	9	5	4	4	5	5	0	5	5	7
30¼	5	3	7	5	4	3	5	4	10	5	5	6	5	6	2
30½	5	4	2	5	4	9	5	5	5	5	6	1	5	6	8
30¾	5	4	8	5	5	4	5	5	11	5	6	7	5	7	3
31	5	5	2	5	5	10	5	6	6	5	7	2	5	7	9
31¼	5	5	9	5	6	4	5	7	0	5	7	8	5	8	4
31½	5	6	3	5	6	11	5	7	7	5	8	3	5	8	10
31¾	5	6	9	5	7	5	5	8	1	5	8	9	5	9	5
32	5	7	4	5	8	0	5	8	8	5	9	4	5	10	0
32¼	5	7	10	5	8	6	5	9	2	5	9	10	5	10	6
32½	5	8	4	5	9	0	5	9	8	5	10	5	5	11	1
32¾	5	8	10	5	9	7	5	10	3	5	10	11	5	11	7
33	5	9	5	5	10	1	5	10	9	5	11	6	6	0	2
33¼	5	9	11	5	10	7	5	11	4	6	0	0	6	0	8
33½	5	10	5	5	11	2	5	11	10	6	0	7	6	1	3
33¾	5	11	0	5	11	8	6	0	5	6	1	1	6	1	9
34	5	11	6	6	0	3	6	0	11	6	1	8	6	2	4
34¼	6	0	0	6	0	9	6	1	5	6	2	2	6	2	11
34½	6	0	7	6	1	3	6	2	0	6	2	9	6	3	5
34¾	6	1	1	6	1	10	6	2	6	6	3	3	6	4	0
35	6	1	7	6	2	4	6	3	1	6	3	10	6	4	6
35¼	6	2	2	6	2	10	6	3	7	6	4	4	6	5	1
35½	6	2	8	6	3	5	6	4	2	6	4	11	6	5	7
35¾	6	3	2	6	3	11	6	4	8	6	5	5	6	6	2
36	6	3	9	6	4	6	6	5	3	6	6	0	6	6	9

TABLE XI.

SHOWING THE VALUE OF SQUARES OF GLASS, ETC.

EXPLANATION OF THE TABLE.

THIS Table shows the value of any square of glass, piece of mahogany, or slab of marble, &c., of any content from $\frac{1}{4}$ inch to 6 feet 6 inches; and at any price from 3*d.* to 4*s.* per superficial or square foot.

In the left hand column is found the content in feet, inches, and parts, occupying the left hand column of two pages; on the top of the other 5 columns of the pages are placed the various prices, under which, and opposite any given content, is found its value at any given price per square foot.

The table may be extended to meet greater contents or prices, by doubling or otherwise combining either the contents or the prices, as may be necessary.

Note.—As the solid or cubic foot is divided into the same number of inches and parts as the superficial foot, this table will equally show the value of any piece of marble, wood, or other solid, of a given content, and at a given price per cubic foot.

EXAMPLES.

1. Required the value of a pane of glass, containing 2 feet $8\frac{1}{2}$ inches, at 1*s.* 5*d.* per square foot?

Look on the top of the page for 1*s.* 5*d.*, and in the left hand column for 2 feet $8\frac{1}{2}$ inches, opposite which, and under 1*s.* 5*d.*, you will find 3*s.* 10*d.*, the value of the pane.

2. Required the value of a tablet of marble, the solid content of which is 2 feet $9\frac{1}{2}$ inches, at 3*s.* 6*d.* per cubic foot?

Find 3*s.* 6*d.* on the top of the page, under which, and opposite 2 feet $9\frac{1}{2}$ inches in the left hand column, stands 9*s.* $9\frac{1}{2}$*d.*, the value of the tablet.

Content.			3*d.* per foot.		4*d.* per foot.		5*d.* per foot.		6*d.* per foot.		7*d.* per foot.	
Ft.	In.	Pts.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
0	0	3	0	0	0	0	0	0	0	0¼	0	0¼
0	0	6	0	0¼	0	0¼	0	0¼	0	0¼	0	0¼
0	0	9	0	0¼	0	0¼	0	0¼	0	0½	0	0½
0	1	0	0	0¼	0	0½	0	0½	0	0½	0	0½
0	1	6	0	0½	0	0¾	0	0¾	0	0¾	0	1
0	2	0	0	0½	0	0¾	0	0¾	0	1	0	1¼
0	2	6	0	0¾	0	1	0	1	0	1¼	0	1½
0	3	0	0	0¾	0	1	0	1¼	0	1½	0	1¾
0	3	6	0	1	0	1¼	0	1½	0	1¾	0	2
0	4	0	0	1	0	1¼	0	1¾	0	2	0	2¼
0	4	6	0	1¼	0	1½	0	2	0	2¼	0	2¾
0	5	0	0	1¼	0	1¾	0	2	0	2½	0	3
0	5	6	0	1½	0	1¾	0	2¼	0	2¾	0	3¼
0	6	0	0	1½	0	2	0	2½	0	3	0	3½
0	6	6	0	1¾	0	2¼	0	2¾	0	3¼	0	3¾
0	7	0	0	1¾	0	2¼	0	3	0	3½	0	4
0	7	6	0	2	0	2½	0	3¼	0	3¾	0	4½
0	8	0	0	2	0	2¾	0	3¼	0	4	0	4¾
0	8	6	0	2¼	0	2¾	0	3½	0	4¼	0	5
0	9	0	0	2¼	0	3	0	3¾	0	4½	0	5¼
0	9	6	0	2½	0	3¼	0	4	0	4¾	0	5½
0	10	0	0	2½	0	3¼	0	4¼	0	5	0	5¾
0	10	6	0	2¾	0	3½	0	4½	0	5¼	0	6¼
0	11	0	0	2¾	0	3¾	0	4½	0	5½	0	6½
0	11	6	0	3	0	3¾	0	4¾	0	5¾	0	6¾
1	0	0	0	3	0	4	0	5	0	6	0	7
1	0	6	0	3¼	0	4¼	0	5¼	0	6¼	0	7¼
1	1	0	0	3¼	0	4¼	0	5½	0	6½	0	7½
1	1	6	0	3½	0	4½	0	5¾	0	6¾	0	8
1	2	0	0	3½	0	4¾	0	5¾	0	7	0	8¼
1	2	6	0	3¾	0	4¾	0	6	0	7¼	0	8½
1	3	0	0	3¾	0	5	0	6¼	0	7½	0	8¾
1	3	6	0	4	0	5¼	0	6½	0	7¾	0	9
1	4	0	0	4	0	5¼	0	6¾	0	8	0	9¼
1	4	6	0	4¼	0	5½	0	7	0	8¼	0	9½
1	5	0	0	4¼	0	5¾	0	7	0	8½	0	10
1	5	6	0	4½	0	5¾	0	7¼	0	8¾	0	10¼
1	6	0	0	4½	0	6	0	7½	0	9	0	10½
1	6	6	0	4¾	0	6¼	0	7¾	0	9¼	0	10¾
1	7	0	0	4¾	0	6¼	0	8	0	9½	0	11
1	7	6	0	5	0	6½	0	8¼	0	9¾	0	11½
1	8	0	0	5	0	6¾	0	8¼	0	10	0	11¾
1	8	6	0	5¼	0	6¾	0	8½	0	10½	1	0
1	9	0	0	5¼	0	7	0	8¾	0	10½	1	0¼

CONTENT.			3d. per foot.		4d. per foot.		5d. per foot.		6d. per foot.		7d. per foot.	
Ft.	In.	Pts.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
1	9	6	0	5½	0	7¼	0	9	0	10¾	1	0½
1	10	0	0	5½	0	7¼	0	9¼	0	11	1	0¾
1	10	6	0	5½	0	7½	0	9½	0	11¼	1	1¼
1	11	0	0	5¾	0	7¾	0	9½	0	11½	1	1½
1	11	6	0	6	0	7¾	0	9¾	0	11¾	1	1¾
2	0	0	0	6	0	8	0	10	1	0	1	2
2	0	6	0	6¼	0	8¼	0	10¼	1	0¼	1	2¼
2	1	0	0	6¼	0	8¼	0	10½	1	0½	1	2½
2	1	6	0	6½	0	8½	0	10¾	1	0¾	1	3
2	2	0	0	6½	0	8¾	0	10¾	1	1	1	3¼
2	2	6	0	6¾	0	8¾	0	11	1	1¼	1	3½
2	3	0	0	6¾	0	9	0	11¼	1	1½	1	3¾
2	3	6	0	7	0	9¼	0	11½	1	1¾	1	4
2	4	0	0	7	0	9¼	0	11¾	1	2	1	4¼
2	4	6	0	7¼	0	9½	1	0	1	2¼	1	4¾
2	5	0	0	7¼	0	9¾	1	0	1	2½	1	5
2	5	6	0	7½	0	9¾	1	0¼	1	2¾	1	5¼
2	6	0	0	7½	0	10	1	0½	1	3	1	5½
2	6	6	0	7¾	0	10¼	1	0¾	1	3¼	1	5¾
2	7	0	0	7¾	0	10¼	1	1	1	3½	1	6
2	7	6	0	8	0	10½	1	1¼	1	3¾	1	6¼
2	8	0	0	8	0	10¾	1	1¼	1	4	1	6¾
2	8	6	0	8¼	0	10¾	1	1½	1	4¼	1	7
2	9	0	0	8¼	0	11	1	1¾	1	4½	1	7¼
2	9	6	0	8½	0	11¼	1	2	1	4¾	1	7½
2	10	0	0	8½	0	11¼	1	2¼	1	5	1	7¾
2	10	6	0	8¾	0	11½	1	2½	1	5¼	1	8¼
2	11	0	0	8¾	0	11¾	1	2½	1	5½	1	8½
2	11	6	0	9	0	11¾	1	2¾	1	5¾	1	8¾
3	0	0	0	9	1	0	1	3	1	6	1	9
3	3	0	0	9¾	1	1	1	4¼	1	7½	1	10¾
3	6	0	0	10½	1	2	1	5½	1	9	2	0½
3	9	0	0	11¼	1	3	1	6¾	1	10½	2	2¼
4	0	0	1	0	1	4	1	8	2	0	2	4
4	3	0	1	0¾	1	5	1	9¼	2	1½	2	5¾
4	6	0	1	1½	1	6	1	10½	2	3	2	7½
4	9	0	1	2¼	1	7	1	11¾	2	4½	2	9¼
5	0	0	1	3	1	8	2	1	2	6	2	11
5	3	0	1	3¾	1	9	2	2¼	2	7½	3	0¾
5	6	0	1	4½	1	10	2	3½	2	9	3	2½
5	9	0	1	5¾	1	11	2	4¾	2	10½	3	4¼
6	0	0	1	6	2	0	2	6	3	0	3	6
6	3	0	1	6¾	2	1	2	7¼	3	1½	3	7¾
6	6	0	1	7½	2	2	2	8½	3	3	3	9½

Content.			8*d.* per foot.		9*d.* per foot.		10*d.* per foot.		11*d.* per foot.		1*s.* per foot.	
Ft.	In.	Pts.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
0	0	3	0	0 1/4	0	0 1/4	0	0 1/4	0	0 1/4	0	0 1/4
0	0	6	0	0 1/4	0	0 1/2	0	0 1/2	0	0 1/2	0	0 1/2
0	0	9	0	0 1/2	0	0 1/2	0	0 3/4	0	0 3/4	0	0 3/4
0	1	0	0	0 3/4	0	0 3/4	0	0 3/4	0	1	0	1
0	1	6	0	1	0	1 1/4	0	1 1/4	0	1 1/2	0	1 1/2
0	2	0	0	1 1/4	0	1 1/2	0	1 1/4	0	1 3/4	0	2
0	2	6	0	1 3/4	0	2	0	2	0	2 1/4	0	2 1/2
0	3	0	0	2	0	2 1/4	0	2 1/2	0	2 3/4	0	3
0	3	6	0	2 1/4	0	2 3/4	0	3	0	3 1/4	0	3 1/2
0	4	0	0	2 3/4	0	3	0	3 1/4	0	3 3/4	0	4
0	4	6	0	3	0	3 1/2	0	3 3/4	0	4 1/4	0	4 1/2
0	5	0	0	3 1/4	0	3 3/4	0	4 1/4	0	4 3/4	0	5
0	5	6	0	3 1/4	0	4 1/4	0	4 1/2	0	5	0	5 1/2
0	6	0	0	4	0	4 1/2	0	5	0	5 1/2	0	6
0	6	6	0	4 1/4	0	5	0	5 1/2	0	6	0	6 1/2
0	7	0	0	4 3/4	0	5 1/4	0	5 3/4	0	6 1/2	0	7
0	7	6	0	5	0	5 3/4	0	6 1/4	0	7	0	7 1/2
0	8	0	0	5 1/4	0	6	0	6 3/4	0	7 1/4	0	8
0	8	6	0	5 3/4	0	6 1/2	0	7	0	7 3/4	0	8 1/2
0	9	0	0	6	0	6 3/4	0	7 1/2	0	8 1/4	0	9
0	9	6	0	6 1/4	0	7 1/4	0	8	0	8 3/4	0	9 1/2
0	10	0	0	6 3/4	0	7 1/2	0	8 1/4	0	9 1/4	0	10
0	10	6	0	7	0	8	0	8 3/4	0	9 3/4	0	10 1/2
0	11	0	0	7 1/4	0	8 1/4	0	9 1/4	0	10	0	11
0	11	6	0	7 3/4	0	8 3/4	0	9 1/2	0	10 1/2	0	11 1/2
1	0	0	0	8	0	9	0	10	0	11	1	0
1	0	6	0	8 1/4	0	9 1/2	0	10 1/2	0	11 1/2	1	0 1/2
1	1	0	0	8 3/4	0	9 3/4	0	10 3/4	1	0	1	1
1	1	6	0	9	0	10 1/4	0	11 1/4	1	0 1/2	1	1 1/2
1	2	0	0	9 1/4	0	10 1/2	0	11 3/4	1	0 3/4	1	2
1	2	6	0	9 3/4	0	11	1	0	1	1 1/4	1	2 1/2
1	3	0	0	10	0	11 1/4	1	0 1/2	1	1 3/4	1	3
1	3	6	0	10 1/4	0	11 3/4	1	1	1	2 1/4	1	3 1/2
1	4	0	0	10 3/4	1	0	1	1 1/4	1	2 3/4	1	4
1	4	6	0	11	1	0 1/2	1	1 3/4	1	3 1/4	1	4 1/2
1	5	0	0	11 1/4	1	0 3/4	1	2 1/4	1	3 1/2	1	5
1	5	6	0	11 3/4	1	1 1/4	1	2 1/2	1	4	1	5 1/2
1	6	0	1	0	1	1 1/2	1	3	1	4 1/2	1	6
1	6	6	1	0 1/4	1	2	1	3 1/2	1	5	1	6 1/2
1	7	0	1	0 3/4	1	2 1/4	1	3 3/4	1	5 1/2	1	7
1	7	6	1	1	1	2 3/4	1	4 1/4	1	6	1	7 1/2
1	8	0	1	1 1/4	1	3	1	4 3/4	1	6 1/2	1	8
1	8	6	1	1 3/4	1	3 1/2	1	5	1	6 3/4	1	8 1/2
1	9	0	1	2	1	3 3/4	1	5 1/2	1	7 1/4	1	9

Content.			8*d.* per foot.		9*d.* per foot.		10*d.* per foot.		11*d.* per foot.		1*s.* per foot.	
Ft.	In.	Pts.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
1	9	6	1	$2\frac{1}{4}$	1	$4\frac{1}{2}$	1	6	1	$7\frac{3}{4}$	1	$9\frac{1}{2}$
1	10	0	1	$2\frac{3}{4}$	1	$4\frac{1}{2}$	1	$6\frac{1}{2}$	1	$8\frac{1}{4}$	1	10
1	10	6	1	3	1	5	1	$6\frac{3}{4}$	1	$8\frac{3}{4}$	1	$10\frac{1}{2}$
1	11	0	1	$3\frac{1}{4}$	1	$5\frac{1}{4}$	1	$7\frac{1}{4}$	1	9	1	11
1	11	6	1	$3\frac{3}{4}$	1	$5\frac{3}{4}$	1	$7\frac{1}{2}$	1	$9\frac{1}{2}$	1	$11\frac{1}{2}$
2	0	0	1	4	1	6	1	8	1	10	2	0
2	0	6	1	$4\frac{1}{2}$	1	$6\frac{1}{2}$	1	$8\frac{1}{2}$	1	$10\frac{1}{2}$	2	$0\frac{1}{2}$
2	1	0	1	$4\frac{3}{4}$	1	$6\frac{3}{4}$	1	$8\frac{3}{4}$	1	11	2	1
2	1	6	1	5	1	$7\frac{1}{4}$	1	$9\frac{1}{4}$	1	$11\frac{1}{2}$	2	$1\frac{1}{2}$
2	2	0	1	$5\frac{1}{4}$	1	$7\frac{1}{2}$	1	$9\frac{3}{4}$	1	$11\frac{3}{4}$	2	2
2	2	6	1	$5\frac{3}{4}$	1	8	1	10	2	$0\frac{1}{4}$	2	$2\frac{1}{2}$
2	3	0	1	6	1	$8\frac{1}{4}$	1	$10\frac{1}{2}$	2	$0\frac{3}{4}$	2	3
2	3	6	1	$6\frac{1}{4}$	1	$8\frac{3}{4}$	1	11	2	$1\frac{1}{4}$	2	$3\frac{1}{2}$
2	4	0	1	$6\frac{3}{4}$	1	9	1	$11\frac{1}{4}$	2	$1\frac{3}{4}$	2	4
2	4	6	1	7	1	$9\frac{1}{2}$	1	$11\frac{3}{4}$	2	$2\frac{1}{4}$	2	$4\frac{1}{2}$
2	5	0	1	$7\frac{1}{4}$	1	$9\frac{3}{4}$	2	$0\frac{1}{4}$	2	$2\frac{3}{4}$	2	5
2	5	6	1	$7\frac{3}{4}$	1	$10\frac{1}{4}$	2	$0\frac{1}{2}$	2	3	2	$5\frac{1}{2}$
2	6	0	1	8	1	$10\frac{1}{2}$	2	1	2	$3\frac{1}{2}$	2	6
2	6	6	1	$8\frac{1}{4}$	1	11	2	$1\frac{1}{2}$	2	4	2	$6\frac{1}{2}$
2	7	0	1	$8\frac{3}{4}$	1	$11\frac{1}{4}$	2	$1\frac{3}{4}$	2	$4\frac{1}{2}$	2	7
2	7	6	1	9	1	$11\frac{3}{4}$	2	$2\frac{1}{4}$	2	5	2	$7\frac{1}{2}$
2	8	0	1	$9\frac{1}{4}$	2	0	2	$2\frac{3}{4}$	2	$5\frac{1}{4}$	2	8
2	8	6	1	$9\frac{3}{4}$	2	$0\frac{1}{2}$	2	3	2	$5\frac{3}{4}$	2	$8\frac{1}{2}$
2	9	0	1	10	2	$0\frac{3}{4}$	2	$3\frac{1}{2}$	2	$6\frac{1}{4}$	2	9
2	9	6	1	$10\frac{1}{4}$	2	$1\frac{1}{4}$	2	4	2	$6\frac{3}{4}$	2	$9\frac{1}{2}$
2	10	0	1	$10\frac{3}{4}$	2	$1\frac{1}{2}$	2	$4\frac{1}{4}$	2	$7\frac{1}{4}$	2	10
2	10	6	1	11	2	2	2	$4\frac{3}{4}$	2	$7\frac{3}{4}$	2	$10\frac{1}{2}$
2	11	0	1	$11\frac{1}{4}$	2	$2\frac{1}{4}$	2	$5\frac{1}{4}$	2	8	2	11
2	11	6	1	$11\frac{3}{4}$	2	$2\frac{3}{4}$	2	$5\frac{1}{2}$	2	$8\frac{1}{2}$	2	$11\frac{1}{2}$
3	0	0	2	0	2	3	2	6	2	9	3	0
3	3	0	2	2	2	$5\frac{1}{4}$	2	$8\frac{1}{2}$	2	$11\frac{3}{4}$	3	3
3	6	0	2	4	2	$7\frac{1}{2}$	2	11	3	$2\frac{1}{2}$	3	6
3	9	0	2	6	2	$9\frac{3}{4}$	3	$1\frac{1}{2}$	3	$5\frac{1}{4}$	3	9
4	0	0	2	8	3	0	3	4	3	8	4	0
4	3	0	2	10	3	$2\frac{1}{4}$	3	$6\frac{1}{2}$	3	$10\frac{3}{4}$	4	3
4	6	0	3	0	3	$4\frac{1}{2}$	3	9	4	$1\frac{1}{2}$	4	6
4	9	0	3	2	3	$6\frac{3}{4}$	3	$11\frac{1}{2}$	4	$4\frac{1}{4}$	4	9
5	0	0	3	4	3	9	4	2	4	7	5	0
5	3	0	3	6	3	$11\frac{1}{4}$	4	$4\frac{1}{2}$	4	$9\frac{3}{4}$	5	3
5	6	0	3	8	4	$1\frac{1}{2}$	4	7	5	$0\frac{1}{2}$	5	6
5	9	0	3	10	4	$3\frac{3}{4}$	4	$9\frac{1}{2}$	5	$3\frac{1}{4}$	5	9
6	0	0	4	0	4	6	5	0	5	6	6	0
6	3	0	4	2	4	$8\frac{1}{4}$	5	$2\frac{1}{2}$	5	$8\frac{3}{4}$	6	3
6	6	0	4	4	4	$10\frac{1}{2}$	5	5	5	$11\frac{1}{2}$	6	6

Content.			1s. 1d. per foot.		1s. 2d. per foot.		1s. 3d. per foot.		1s. 4d. per foot.		1s. 5d. per foot.	
Ft.	In.	Pts.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
0	0	3	0	0 1/4	0	0 1/4	0	0 1/4	0	0 1/4	0	0 1/4
0	0	6	0	0 1/2	0	0 1/2	0	0 3/4	0	0 3/4	0	0 3/4
0	0	9	0	0 3/4	0	1	0	1	0	1	0	1
0	1	0	0	1	0	1 1/4	0	1 1/4	0	1 1/4	0	1 1/2
0	1	6	0	1 3/4	0	1 3/4	0	2	0	2	0	2 1/4
0	2	0	0	2 1/4	0	2 1/4	0	2 1/2	0	2 3/4	0	2 3/4
0	2	6	0	2 3/4	0	3	0	3 1/4	0	3 1/4	0	3 1/2
0	3	0	0	3 1/4	0	3 1/2	0	3 3/4	0	4	0	4 1/2
0	3	6	0	3 3/4	0	4	0	4 1/2	0	4 3/4	0	5
0	4	0	0	4 1/4	0	4 3/4	0	5	0	5 1/4	0	5 3/4
0	4	6	0	5	0	5 1/4	0	5 3/4	0	6	0	6 1/2
0	5	0	0	5 1/2	0	5 3/4	0	6 1/4	0	6 3/4	0	7
0	5	6	0	6	0	6 1/2	0	7	0	7 1/4	0	7 3/4
0	6	0	0	6 1/2	0	7	0	7 1/2	0	8	0	8 1/4
0	6	6	0	7	0	7 1/2	0	8 1/4	0	8 3/4	0	9 1/4
0	7	0	0	7 1/2	0	8 1/4	0	8 3/4	0	9 1/4	0	10
0	7	6	0	8 1/4	0	8 3/4	0	9 1/2	0	10	0	10 3/4
0	8	0	0	8 3/4	0	9 1/4	0	10	0	10 3/4	0	11 1/4
0	8	6	0	9 1/4	0	10	0	10 3/4	0	11 1/4	1	0
0	9	0	0	9 3/4	0	10 1/2	0	11 1/4	1	0	1	0 3/4
0	9	6	0	10 1/4	0	11	1	0	1	0 3/4	1	1 1/2
0	10	0	0	10 3/4	0	11 3/4	1	0 1/2	1	1 1/4	1	2 1/4
0	10	6	0	11 1/2	1	0 1/4	1	1 1/2	1	2	1	3
0	11	0	1	0	1	0 3/4	1	1 3/4	1	2 3/4	1	3 1/2
0	11	6	1	0 1/2	1	1 1/2	1	2 1/2	1	3 1/4	1	4 1/2
1	0	0	1	1	1	2	1	3	1	4	1	5
1	0	6	1	1 1/2	1	2 1/2	1	3 1/4	1	4 1/2	1	5 1/4
1	1	0	1	2	1	3 1/4	1	4 1/4	1	5 1/4	1	6 1/2
1	1	6	1	2 3/4	1	3 1/2	1	5	1	6	1	7 1/4
1	2	0	1	3 1/4	1	4 1/4	1	5 1/2	1	6 3/4	1	7 3/4
1	2	6	1	3 3/4	1	5	1	6 1/4	1	7 1/4	1	8 3/4
1	3	0	1	4 1/4	1	5 1/2	1	6 3/4	1	8	1	9 1/2
1	3	6	1	4 3/4	1	6	1	7 1/2	1	8 3/4	1	10
1	4	0	1	5 1/4	1	6 3/4	1	8	1	9 1/4	1	10 3/4
1	4	6	1	6	1	7 1/4	1	8 3/4	1	10	1	11 1/2
1	5	0	1	6 1/2	1	7 3/4	1	9 1/4	1	10 3/4	2	0
1	5	6	1	7	1	8 1/2	1	10	1	11 1/4	2	0 3/4
1	6	0	1	7 1/2	1	9	1	10 1/2	2	0	2	1 1/2
1	6	6	1	8	1	9 1/2	1	11 1/4	2	0 3/4	2	2 1/4
1	7	0	1	8 1/2	1	10 1/4	1	11 3/4	2	1 1/4	2	3
1	7	6	1	9 1/4	1	10 3/4	2	0 1/2	2	2	2	3 3/4
1	8	0	1	9 3/4	1	11 1/4	2	1	2	2 3/4	2	4 1/4
1	8	6	1	10 1/4	2	0	2	1 1/2	2	3 1/4	2	5
1	9	0	1	10 3/4	2	0 1/2	2	2 1/4	2	4	2	5 1/4

Content.			1s. 1d. per foot.		1s. 2d. per foot.		1s. 3d. per foot.		1s. 4d. per foot.		1s. 5d. per foot.	
Ft.	In.	Pts.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
1	9	6	1	$11\frac{1}{2}$	2	1	2	3	2	$4\frac{3}{4}$	2	$6\frac{1}{2}$
1	10	0	1	$11\frac{3}{4}$	2	$1\frac{3}{4}$	2	$3\frac{1}{2}$	2	$5\frac{1}{4}$	2	$7\frac{1}{4}$
1	10	6	2	$0\frac{1}{2}$	2	$2\frac{1}{4}$	2	$4\frac{1}{4}$	2	6	2	8
1	11	0	2	1	2	$2\frac{3}{4}$	2	$4\frac{3}{4}$	2	$6\frac{3}{4}$	2	$8\frac{1}{2}$
1	11	6	2	$1\frac{1}{2}$	2	$3\frac{1}{2}$	2	$5\frac{1}{2}$	2	$7\frac{1}{4}$	2	$9\frac{1}{4}$
2	0	0	2	2	2	4	2	6	2	8	2	10
2	0	6	2	$2\frac{1}{2}$	2	$4\frac{1}{2}$	2	$6\frac{3}{4}$	2	$8\frac{3}{4}$	2	$10\frac{3}{4}$
2	1	0	2	3	2	$5\frac{1}{4}$	2	$7\frac{1}{4}$	2	$9\frac{1}{4}$	2	$11\frac{1}{2}$
2	1	6	2	$3\frac{3}{4}$	2	$5\frac{3}{4}$	2	8	2	10	3	$0\frac{1}{4}$
2	2	0	2	$4\frac{1}{4}$	2	$6\frac{1}{4}$	2	$8\frac{1}{2}$	2	$10\frac{3}{4}$	3	$0\frac{3}{4}$
2	2	6	2	$4\frac{3}{4}$	2	7	2	$9\frac{1}{4}$	2	$11\frac{1}{4}$	3	$1\frac{1}{2}$
2	3	0	2	$5\frac{1}{4}$	2	$7\frac{1}{2}$	2	$9\frac{3}{4}$	3	0	3	$2\frac{1}{4}$
2	3	6	2	$5\frac{3}{4}$	2	8	2	$10\frac{1}{2}$	3	$0\frac{3}{4}$	3	3
2	4	0	2	$6\frac{1}{4}$	2	$8\frac{3}{4}$	2	11	3	$1\frac{1}{4}$	3	$3\frac{3}{4}$
2	4	6	2	7	2	$9\frac{1}{4}$	2	$11\frac{3}{4}$	3	2	3	$4\frac{1}{2}$
2	5	0	2	$7\frac{1}{2}$	2	$9\frac{3}{4}$	3	$0\frac{1}{4}$	3	$2\frac{3}{4}$	3	5
2	5	6	2	8	2	$10\frac{1}{2}$	3	1	3	$3\frac{1}{4}$	3	$5\frac{3}{4}$
2	6	0	2	$8\frac{1}{2}$	2	11	3	$1\frac{1}{2}$	3	4	3	$6\frac{1}{2}$
2	6	6	2	9	2	$11\frac{1}{2}$	3	$2\frac{1}{4}$	3	$4\frac{3}{4}$	3	$7\frac{1}{4}$
2	7	0	2	$9\frac{1}{2}$	3	$0\frac{1}{4}$	3	$2\frac{3}{4}$	3	$5\frac{1}{4}$	3	8
2	7	6	2	$10\frac{1}{4}$	3	$0\frac{3}{4}$	3	$3\frac{1}{2}$	3	6	3	$8\frac{3}{4}$
2	8	0	2	$10\frac{3}{4}$	3	$1\frac{1}{4}$	3	4	3	$6\frac{3}{4}$	3	$9\frac{1}{4}$
2	8	6	2	$11\frac{1}{4}$	3	2	3	$4\frac{3}{4}$	3	$7\frac{1}{4}$	3	10
2	9	0	2	$11\frac{3}{4}$	3	$2\frac{1}{2}$	3	$5\frac{1}{4}$	3	8	3	$10\frac{3}{4}$
2	9	6	3	$0\frac{1}{4}$	3	3	3	6	3	$8\frac{3}{4}$	3	$11\frac{1}{2}$
2	10	0	3	$0\frac{3}{4}$	3	$3\frac{1}{4}$	3	$6\frac{1}{2}$	3	$9\frac{1}{4}$	4	$0\frac{1}{4}$
2	10	6	3	$1\frac{1}{2}$	3	$4\frac{1}{4}$	3	$7\frac{1}{4}$	3	10	4	1
2	11	0	3	2	3	$4\frac{3}{4}$	3	$7\frac{3}{4}$	3	$10\frac{3}{4}$	4	$1\frac{1}{2}$
2	11	6	3	$2\frac{1}{2}$	3	$5\frac{1}{2}$	3	$8\frac{1}{2}$	3	$11\frac{1}{4}$	4	$2\frac{1}{4}$
3	0	0	3	3	3	6	3	9	4	0	4	3
3	3	0	3	$6\frac{1}{4}$	3	$9\frac{1}{2}$	4	$0\frac{3}{4}$	4	4	4	$7\frac{1}{4}$
3	6	0	3	$9\frac{1}{2}$	4	1	4	$4\frac{1}{2}$	4	8	4	$11\frac{1}{2}$
3	9	0	4	$0\frac{3}{4}$	4	$4\frac{1}{2}$	4	$8\frac{1}{4}$	5	0	5	$3\frac{3}{4}$
4	0	0	4	4	4	8	5	0	5	4	5	8
4	3	0	4	$7\frac{1}{4}$	4	$11\frac{1}{2}$	5	$3\frac{3}{4}$	5	8	6	$0\frac{1}{4}$
4	6	0	4	$10\frac{3}{4}$	5	3	5	$7\frac{1}{2}$	6	0	6	$4\frac{1}{2}$
4	9	0	5	$1\frac{3}{4}$	5	$6\frac{1}{2}$	5	$11\frac{1}{4}$	6	4	6	$8\frac{3}{4}$
5	0	0	5	5	5	10	6	3	6	8	7	1
5	3	0	5	$8\frac{1}{4}$	6	$1\frac{1}{2}$	6	$6\frac{3}{4}$	7	0	7	$5\frac{1}{4}$
5	6	0	5	$11\frac{1}{2}$	6	5	6	$10\frac{1}{2}$	7	4	7	$9\frac{1}{2}$
5	9	0	6	$2\frac{1}{4}$	6	$8\frac{1}{2}$	7	$2\frac{1}{4}$	7	8	8	$1\frac{3}{4}$
6	0	0	6	6	7	0	7	6	8	0	8	6
6	3	0	6	$9\frac{1}{4}$	7	$3\frac{1}{2}$	7	$9\frac{3}{4}$	8	4	8	$10\frac{1}{4}$
6	6	0	7	$0\frac{1}{2}$	7	7	8	$1\frac{1}{2}$	8	8	9	$2\frac{1}{2}$

CONTENT.			1s. 6d. per foot.		1s. 7d. per foot.		1s. 8d. per foot.		1s. 9d. per foot.		1s. 10d. per foot.	
Ft.	In.	Pts.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
0	0	3	0	0½	0	0½	0	0½	0	0½	0	0½
0	0	6	0	0¾	0	0¾	0	0¾	0	1	0	1
0	0	9	0	1¼	0	1¼	0	1¼	0	1¼	0	1¼
0	1	0	0	1½	0	1½	0	1¾	0	1¾	0	1¾
0	1	6	0	2¼	0	2¼	0	2½	0	2¾	0	2¾
0	2	0	0	3	0	3¼	0	3¼	0	3½	0	3¾
0	2	6	0	3¾	0	4	0	4¼	0	4½	0	4¾
0	3	0	0	4½	0	4¾	0	5	0	5¼	0	5½
0	3	6	0	5¼	0	5½	0	5¾	0	6¼	0	6½
0	4	0	0	6	0	6¼	0	6¾	0	7	0	7¼
0	4	6	0	6¾	0	7¼	0	7½	0	8	0	8¼
0	5	0	0	7½	0	8	0	8¼	0	8¾	0	9¼
0	5	6	0	8¼	0	8¾	0	9¼	0	9¾	0	10
0	6	0	0	9	0	9½	0	10	0	10½	0	11
0	6	6	0	9¾	0	10¼	0	10¾	0	11½	1	0
0	7	0	0	10½	0	11	0	11¾	1	0¼	1	0¾
0	7	6	0	11¼	1	0	1	0½	1	1¼	1	1¾
0	8	0	1	0	1	0¾	1	1¼	1	2	1	2¾
0	8	6	1	0¾	1	1½	1	2¼	1	3	1	3½
0	9	0	1	1½	1	2¼	1	3	1	3¾	1	4½
0	9	6	1	2¼	1	3	1	3¾	1	4¾	1	5½
0	10	0	1	3	1	3¾	1	4¾	1	5½	1	6¼
0	10	6	1	3¾	1	4¾	1	5½	1	6¾	1	7¼
0	11	0	1	4½	1	5½	1	6¼	1	7¼	1	8¼
0	11	6	1	5¼	1	6¼	1	7¼	1	8¼	1	9
1	0	0	1	6	1	7	1	8	1	9	1	10
1	0	6	1	6¾	1	7¾	1	8¾	1	10	1	11
1	1	0	1	7½	1	8½	1	9½	1	10¾	1	11¾
1	1	6	1	8¼	1	9½	1	10½	1	11¾	2	0¼
1	2	0	1	9	1	10¼	1	11¼	2	0½	2	1¼
1	2	6	1	9¾	1	11	2	0¼	2	1½	2	2¼
1	3	0	1	10½	1	11¾	2	1	2	2¼	2	3½
1	3	6	1	11¼	2	0½	2	1¾	2	3¼	2	4½
1	4	0	2	0	2	1¼	2	2¾	2	4	2	5¼
1	4	6	2	0¾	2	2¼	2	3½	2	5	2	6¼
1	5	0	2	1½	2	3	2	4¼	2	5¾	2	7¼
1	5	6	2	2¼	2	3¾	2	5¼	2	6¾	2	8
1	6	0	2	3	2	4½	2	6	2	7½	2	9
1	6	6	2	3¾	2	5¼	2	6¾	2	8½	2	10
1	7	0	2	4½	2	6	2	7¾	2	9¼	2	10¾
1	7	6	2	5¼	2	7	2	8½	2	10¼	2	11¾
1	8	0	2	6	2	7¾	2	9¼	2	11	3	0¾
1	8	6	2	6¾	2	8½	2	10¼	3	0	3	1½
1	9	0	2	7½	2	9¼	2	11	3	0¾	3	2½

Content.			1s. 6d. per foot.	1s. 7d. per foot.	1s. 8d. per foot.	1s. 9d. per foot.	1s. 10d. per foot.
Ft.	In.	Pts.	s. d.	s. d.	s. d.	s. d.	s. d.
1	9	6	2 $8\frac{1}{4}$	2 10	2 $11\frac{3}{4}$	3 $1\frac{3}{4}$	3 $3\frac{1}{2}$
1	10	0	2 9	2 $10\frac{3}{4}$	3 $0\frac{3}{4}$	3 $2\frac{1}{2}$	3 $4\frac{1}{4}$
1	10	6	2 $9\frac{3}{4}$	2 $11\frac{1}{4}$	3 $1\frac{1}{2}$	3 $3\frac{1}{2}$	3 $5\frac{1}{4}$
1	11	0	2 $10\frac{1}{2}$	3 $0\frac{1}{2}$	3 $2\frac{1}{4}$	3 $4\frac{1}{4}$	3 $6\frac{1}{4}$
1	11	6	2 $11\frac{1}{4}$	3 $1\frac{1}{4}$	3 $3\frac{1}{4}$	3 $5\frac{1}{4}$	3 7
2	0	0	3 0	3 2	3 4	3 6	3 8
2	0	6	3 $0\frac{3}{4}$	3 $2\frac{3}{4}$	3 $4\frac{3}{4}$	3 7	3 9
2	1	0	3 $1\frac{1}{2}$	3 $3\frac{1}{2}$	3 $5\frac{1}{2}$	3 $7\frac{1}{2}$	3 $9\frac{1}{2}$
2	1	6	3 $2\frac{1}{4}$	3 $4\frac{1}{2}$	3 $6\frac{1}{2}$	3 $8\frac{3}{4}$	3 $10\frac{3}{4}$
2	2	0	3 3	3 $5\frac{1}{4}$	3 $7\frac{1}{4}$	3 $9\frac{1}{2}$	3 $11\frac{1}{4}$
2	2	6	3 $3\frac{3}{4}$	3 6	3 $8\frac{1}{4}$	3 $10\frac{1}{2}$	4 $0\frac{1}{2}$
2	3	0	3 $4\frac{1}{2}$	3 $6\frac{3}{4}$	3 9	3 $11\frac{1}{4}$	4 $1\frac{1}{2}$
2	3	6	3 $5\frac{1}{4}$	3 $7\frac{1}{2}$	3 $9\frac{3}{4}$	4 $0\frac{1}{4}$	4 $2\frac{1}{2}$
2	4	0	3 6	3 $8\frac{1}{4}$	3 $10\frac{3}{4}$	4 1	4 $3\frac{1}{4}$
2	4	6	3 $6\frac{3}{4}$	3 $9\frac{1}{4}$	3 $11\frac{1}{2}$	4 2	4 $4\frac{1}{4}$
2	5	0	3 $7\frac{1}{2}$	3 10	4 $0\frac{1}{4}$	4 $2\frac{3}{4}$	4 $5\frac{1}{4}$
2	5	6	3 $8\frac{1}{4}$	3 $10\frac{3}{4}$	4 $1\frac{1}{4}$	4 $3\frac{1}{4}$	4 6
2	6	0	3 9	3 $11\frac{1}{2}$	4 2	4 $4\frac{1}{2}$	4 7
2	6	6	3 $9\frac{3}{4}$	4 $0\frac{1}{4}$	4 $2\frac{3}{4}$	4 $5\frac{1}{2}$	4 8
2	7	0	3 $10\frac{1}{2}$	4 1	4 $3\frac{1}{4}$	4 $6\frac{1}{4}$	4 $8\frac{3}{4}$
2	7	6	3 $11\frac{1}{4}$	4 2	4 $4\frac{1}{2}$	4 $7\frac{1}{4}$	4 $9\frac{3}{4}$
2	8	0	4 0	4 $2\frac{3}{4}$	4 $5\frac{1}{2}$	4 8	4 $10\frac{3}{4}$
2	8	6	4 $0\frac{3}{4}$	4 $3\frac{1}{2}$	4 $6\frac{1}{4}$	4 9	4 $11\frac{1}{2}$
2	9	0	4 $1\frac{1}{2}$	4 $4\frac{1}{2}$	4 7	4 $9\frac{3}{4}$	5 $0\frac{1}{2}$
2	9	6	4 $2\frac{1}{4}$	4 5	4 $7\frac{3}{4}$	4 $10\frac{3}{4}$	5 $1\frac{1}{2}$
2	10	0	4 3	4 $5\frac{3}{4}$	4 $8\frac{1}{2}$	4 $11\frac{1}{2}$	5 $2\frac{1}{4}$
2	10	6	4 $3\frac{3}{4}$	4 $6\frac{1}{2}$	4 $9\frac{1}{2}$	5 $0\frac{1}{2}$	5 $3\frac{1}{4}$
2	11	0	4 $4\frac{1}{2}$	4 $7\frac{1}{2}$	4 $10\frac{1}{4}$	5 $1\frac{1}{4}$	5 $4\frac{1}{4}$
2	11	6	4 $5\frac{1}{4}$	4 $8\frac{1}{4}$	4 $11\frac{1}{4}$	5 $2\frac{1}{4}$	5 5
3	0	0	4 6	4 9	5 0	5 3	5 6
3	3	0	4 $10\frac{1}{2}$	5 $1\frac{3}{4}$	5 5	5 $8\frac{1}{4}$	5 $11\frac{1}{2}$
3	6	0	5 3	5 $6\frac{3}{4}$	5 10	6 $1\frac{3}{4}$	6 5
3	9	0	5 $7\frac{1}{2}$	5 $11\frac{1}{4}$	6 3	6 $6\frac{3}{4}$	6 $10\frac{1}{2}$
4	0	0	6 0	6 4	6 8	7 0	7 4
4	3	0	6 $4\frac{1}{2}$	6 $8\frac{3}{4}$	7 1	7 $5\frac{1}{4}$	7 $9\frac{1}{2}$
4	6	0	6 9	7 $1\frac{1}{2}$	7 6	7 $10\frac{3}{4}$	8 3
4	9	0	7 $1\frac{1}{2}$	7 $6\frac{1}{4}$	7 11	8 $3\frac{1}{4}$	8 $8\frac{1}{2}$
5	0	0	7 6	7 11	8 4	8 9	9 2
5	3	0	7 $10\frac{1}{2}$	8 $3\frac{3}{4}$	8 9	9 $2\frac{1}{4}$	9 $7\frac{1}{2}$
5	6	0	8 3	8 $8\frac{1}{2}$	9 2	9 $7\frac{1}{2}$	10 1
5	9	0	8 $7\frac{1}{2}$	9 $1\frac{1}{4}$	9 7	10 $0\frac{3}{4}$	10 $6\frac{1}{2}$
6	0	0	9 0	9 6	10 0	10 6	11 0
6	3	0	9 $4\frac{1}{2}$	9 $10\frac{3}{4}$	10 5	10 $11\frac{1}{4}$	11 $5\frac{1}{2}$
6	6	0	9 9	10 $3\frac{1}{2}$	10 10	11 $4\frac{1}{2}$	11 11

Content.			1s. 11d. per foot.		2s. per foot		2s. 3d. per foot.		2s. 6d. per foot.		2s. 9d. per foot.	
Ft.	In.	Pts.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
0	0	3	0	0½	0	0½	0	0½	0	0¾	0	0¾
0	0	6	0	1	0	1	0	1¼	0	1¼	0	1½
0	0	9	0	1½	0	1½	0	1¾	0	2	0	2
0	1	0	0	2	0	2	0	2¼	0	2½	0	2¾
0	1	6	0	3	0	3	0	3½	0	3¾	0	4¼
0	2	0	0	3¾	0	4	0	4½	0	5	0	5½
0	2	6	0	4¾	0	5	0	5¾	0	6¼	0	7
0	3	0	0	5¾	0	6	0	6¾	0	7½	0	8¼
0	3	6	0	6¾	0	7	0	8	0	8¾	0	9¼
0	4	0	0	7¾	0	8	0	9	0	10	0	11
0	4	6	0	8¾	0	9	0	10¼	0	11¼	1	0½
0	5	0	0	9½	0	10	0	11¼	1	0½	1	1¾
0	5	6	0	10½	0	11	1	0½	1	1¼	1	3¼
0	6	0	0	11½	1	0	1	1½	1	3	1	4½
0	6	6	1	0½	1	1	1	2¼	1	4¼	1	6
0	7	0	1	1½	1	2	1	3¼	1	5½	1	7¼
0	7	6	1	2½	1	3	1	5	1	6¼	1	8¼
0	8	0	1	3¼	1	4	1	6	1	8	1	10
0	8	6	1	4¼	1	5	1	7¼	1	9¼	1	11½
0	9	0	1	5¼	1	6	1	8¼	1	10½	2	0¾
0	9	6	1	6¼	1	7	1	9½	1	11¾	2	2¼
0	10	0	1	7¼	1	8	1	10½	2	1	2	3½
0	10	6	1	8¼	1	9	1	11¼	2	2¼	2	5
0	11	0	1	9	1	10	2	0¼	2	3½	2	6¼
0	11	6	1	10	1	11	2	2	2	4¾	2	7¾
1	0	0	1	11	2	0	2	3	2	6	2	9
1	0	6	2	0	2	1	2	4¼	2	7¼	2	10½
1	1	0	2	1	2	2	2	5¼	2	8½	2	11¾
1	1	6	2	2	2	3	2	6½	2	9¾	3	1¼
1	2	0	2	2¾	2	4	2	7½	2	11	3	2½
1	2	6	2	3¾	2	5	2	8¾	3	0¼	3	4
1	3	0	2	4¾	2	6	2	9¾	3	1½	3	5¼
1	3	6	2	5¾	2	7	2	11	3	2¾	3	6¾
1	4	0	2	6¾	2	8	3	0	3	4	3	8
1	4	6	2	7¾	2	9	3	1¼	3	5¼	3	9½
1	5	0	2	8½	2	10	3	2¼	3	6½	3	10¾
1	5	6	2	9½	2	11	3	3½	3	7¾	4	0¼
1	6	0	2	10½	3	0	3	4½	3	9	4	1½
1	6	6	2	11½	3	1	3	5¾	3	10¼	4	3
1	7	0	3	0½	3	2	3	6¾	3	11½	4	4¼
1	7	6	3	1½	3	3	3	8	4	0¾	4	5¾
1	8	0	3	2¼	3	4	3	9	4	2	4	7
1	8	6	3	3¼	3	5	3	10¼	4	3¼	4	8½
1	9	0	3	4¼	3	6	3	11¼	4	4½	4	9¾

CONTENT.			1s. 11d. per foot.	2s. per foot.	2s. 3d. per foot.	2s. 6d. per foot.	2s. 9d. per foot.
Ft.	In.	Pts.	s. d.	s. d.	s. d.	s. d.	s. d.
1	9	6	3 5½	3 7	4 0½	4 5¾	4 11¼
1	10	0	3 6¼	3 8	4 1½	4 7	5 0½
1	10	6	3 7¼	3 9	4 2¾	4 8¼	5 2
1	11	0	3 8	3 10	4 3¾	4 9½	5 3¼
1	11	6	3 9	3 11	4 5	4 10¾	5 4¾
2	0	0	3 10	4 0	4 6	5 0	5 6
2	0	6	3 11	4 1	4 7¼	5 1¼	5 7½
2	1	0	4 0	4 2	4 8¼	5 2½	5 8¾
2	1	6	4 1	4 3	4 9½	5 3¾	5 10¼
2	2	0	4 1½	4 4	4 10½	5 5	5 11½
2	2	6	4 2¾	4 5	4 11¾	5 6¼	6 1
2	3	0	4 3¾	4 6	5 0¾	5 7½	6 2¼
2	3	6	4 4¾	4 7	5 2	5 8¾	6 3¾
2	4	0	4 5¾	4 8	5 3	5 10	6 5
2	4	6	4 6¾	4 9	5 4¼	6 11¼	6 6½
2	5	0	4 7½	4 10	5 5½	6 0½	6 7¾
2	5	6	4 8½	4 11	5 6½	6 1¾	6 9¼
2	6	0	4 9½	5 0	5 7½	6 3	6 10½
2	6	6	4 10½	5 1	5 8¾	6 4¼	7 0
2	7	0	4 11½	5 2	5 9¾	6 5½	7 1¾
2	7	6	5 0½	5 3	5 11	6 6¾	7 2¾
2	8	0	5 1¼	5 4	6 0	6 8	7 4
2	8	6	5 2¼	5 5	6 1¼	6 9¼	7 5½
2	9	0	5 3¼	5 6	6 2¼	6 10½	7 6¾
2	9	6	5 4¼	5 7	6 3½	6 11¾	7 8¼
2	10	0	5 5¼	5 8	6 4½	7 1	7 9½
2	10	6	5 6¼	5 9	6 5¾	7 2¼	7 11
2	11	0	5 7	5 10	6 6¾	7 3½	8 0¼
2	11	6	5 8	5 11	6 8	7 4¾	8 1¾
3	0	0	5 9	6 0	6 9	7 6	8 3
3	3	0	6 2¾	6 6	7 3¾	8 1½	8 11¼
3	6	0	6 8½	7 0	7 10½	8 9	9 7½
3	9	0	7 2¼	7 6	8 5¼	9 4½	10 3¾
4	0	0	7 8	8 0	9 0	10 0	11 0
4	3	0	8 1¾	8 6	9 6¾	10 7½	11 8¼
4	6	0	8 7½	9 0	10 1½	11 3	12 4½
4	9	0	9 1¼	9 6	10 8¼	11 10½	13 0¾
5	0	0	9 7	10 0	11 3	12 6	13 9
5	3	0	10 0¾	10 6	11 9¾	13 1½	14 5¼
5	6	0	10 6¾	11 0	12 4½	13 9	15 1½
5	9	0	11 0¼	11 6	12 11¼	14 4½	15 9¾
6	0	0	11 6	12 0	13 6	15 0	16 6
6	3	0	11 11¾	12 6	14 0¾	15 7½	17 2¼
6	6	0	12 5½	13 0	14 7½	16 3	17 10½

CONTENT.			3s. per foot.		3s. 3d. per foot.		3s. 6d. per foot.		3s. 9d. per foot.		4s. per foot.	
Ft.	In.	Pts.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
0	0	3	0	0 3/4	0	0 3/4	0	1	0	1	0	1
0	0	6	0	1 1/2	0	1 3/4	0	1 3/4	0	2	0	2
0	0	9	0	2 1/4	0	2 1/2	0	2 3/4	0	2 3/4	0	3
0	1	0	0	3	0	3 1/4	0	3 1/2	0	3 3/4	0	4
0	1	6	0	4 1/2	0	5	0	5 1/4	0	5 3/4	0	6
0	2	0	0	6	0	6 1/2	0	7	0	7 1/2	0	8
0	2	6	0	7 1/2	0	8 1/4	0	8 3/4	0	9 1/2	0	10
0	3	0	0	9	0	9 3/4	0	10 1/2	0	11 1/4	1	0
0	3	6	0	10 1/2	0	11 1/2	1	0 1/4	1	1 1/4	1	2
0	4	0	1	0	1	1	1	2	1	3	1	4
0	4	6	1	1 1/2	1	2 3/4	1	3 3/4	1	5	1	6
0	5	0	1	3	1	4 1/4	1	5 1/2	1	6 3/4	1	8
0	5	6	1	4 1/2	1	6	1	7 1/4	1	8 3/4	1	10
0	6	0	1	6	1	7 1/2	1	9	1	10 1/2	2	0
0	6	6	1	7 1/2	1	9 1/4	1	10 3/4	2	0 1/2	2	2
0	7	0	1	9	1	10 3/4	2	0 1/2	2	2 1/4	2	4
0	7	6	1	10 1/2	2	0 1/2	2	2 1/4	2	4 1/4	2	6
0	8	0	2	0	2	2	2	4	2	6	2	8
0	8	6	2	1 1/2	2	3 3/4	2	5 3/4	2	8	2	10
0	9	0	2	3	2	5 1/4	2	7 1/2	2	9 3/4	3	0
0	9	6	2	4 1/2	2	7	2	9 1/4	2	11 1/4	3	2
0	10	0	2	6	2	8 1/2	2	11	3	1 1/2	3	4
0	10	6	2	7 1/2	2	10 1/4	3	0 3/4	3	3 1/2	3	6
0	11	0	2	9	2	11 3/4	3	2 1/2	3	5 1/4	3	8
0	11	6	2	10 1/2	3	1 1/2	3	4 1/4	3	7 1/4	3	10
1	0	0	3	0	3	3	3	6	3	9	4	0
1	0	6	3	1 1/2	3	4 3/4	3	7 3/4	3	11	4	2
1	1	0	3	3	3	6 1/4	3	9 1/2	4	0 3/4	4	4
1	1	6	3	4 1/2	3	8	3	11 1/4	4	2 1/4	4	6
1	2	0	3	6	3	9 1/2	3	1	4	4 1/2	4	8
1	2	6	3	7 1/2	3	11 1/4	3	2 3/4	4	6 1/2	4	10
1	3	0	3	9	4	0 3/4	4	4 1/2	4	8 1/4	5	0
1	3	6	3	10 1/2	4	2 1/2	4	6 1/4	4	10 1/4	5	2
1	4	0	4	0	4	4	4	8	5	0	5	4
1	4	6	4	1 1/2	4	5 3/4	4	9 3/4	5	2	5	6
1	5	0	4	3	4	7 1/4	4	11 1/2	5	3 3/4	5	8
1	5	6	4	4 1/2	4	9	5	1 1/4	5	5 1/4	5	10
1	6	0	4	6	4	10 1/2	5	3	5	7 1/2	6	0
1	6	6	4	7 1/2	5	0 1/4	5	4 3/4	5	9 1/2	6	2
1	7	0	4	9	5	1 3/4	5	6 1/2	5	11 1/4	6	4
1	7	6	4	10 1/2	5	3 1/2	5	8 1/4	6	1 1/4	6	6
1	8	0	5	0	5	5	5	10	6	3	6	8
1	8	6	5	1 1/2	5	6 3/4	5	11 3/4	6	5	6	10
1	9	0	5	3	5	8 1/4	6	1 1/2	6	6 3/4	7	0

Content.			3s. per foot.		3s. 3d. per foot.		3s. 6d. per foot.		3s. 9d. per foot.		4s. per foot.	
Ft.	In.	Pts	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
1	9	6	5	4½	5	10	6	3¼	6	8¾	7	2
1	10	0	5	6	5	11½	6	5	6	10½	7	4
1	10	6	5	7½	6	1¼	6	6¾	7	0¼	7	6
1	11	0	5	9	6	2¾	6	8½	7	2¼	7	8
1	11	6	5	10½	6	4½	6	10¼	7	4¼	7	10
2	0	0	6	0	6	6	7	0	7	6	8	0
2	0	6	6	1½	6	7¾	7	1¾	7	8	8	2
2	1	0	6	3	6	9¼	7	3½	7	9¾	8	4
2	1	6	6	4½	6	11	7	5¼	7	11¾	8	6
2	2	0	6	6	7	0½	7	7	8	1½	8	8
2	2	6	6	7½	7	2¼	7	8¾	8	3½	8	10
2	3	0	6	9	7	3¾	7	10½	8	5¼	9	0
2	3	6	6	10½	7	5½	8	0¼	8	7¼	9	2
2	4	0	7	0	7	7	8	2	8	9	9	4
2	4	6	7	1½	7	8¾	8	3¾	8	11	9	6
2	5	0	7	3	7	10¼	8	5½	9	0¾	9	8
2	5	6	7	4½	8	0	8	7¼	9	2¾	9	10
2	6	0	7	6	8	1½	8	9	9	4½	10	0
2	6	6	7	7½	8	3¼	8	10¾	9	6½	10	2
2	7	0	7	9	8	4¾	9	0½	9	8¼	10	4
2	7	6	7	10½	8	6½	9	2¼	9	10¼	10	6
2	8	0	8	0	8	8	9	4	10	0	10	8
2	8	6	8	1½	8	9¾	9	5¾	10	2	10	10
2	9	0	8	3	8	11¼	9	7½	10	3¾	11	0
2	9	6	8	4½	9	1	9	9¼	10	5¾	11	2
2	10	0	8	6	9	2½	9	11	10	7½	11	4
2	10	6	8	7½	9	4¼	10	0¾	10	9½	11	6
2	11	0	8	9	9	5¾	10	2½	10	11¼	11	8
2	11	6	8	10½	9	7½	10	4¼	11	1¼	11	10
3	0	0	9	0	9	9	10	6	11	3	12	0
3	3	0	9	9	10	6¾	11	4½	12	2¼	13	0
3	6	0	10	6	11	4½	12	3	13	1½	14	0
3	9	0	11	3	12	2¼	13	1½	14	0¾	15	0
4	0	0	12	0	13	0	14	0	15	0	16	0
4	3	0	12	9	13	9¾	14	10½	15	11¼	17	0
4	6	0	13	6	14	7½	15	9	16	10½	18	0
4	9	0	14	3	15	5¼	16	7½	17	9¾	19	0
5	0	0	15	0	16	3	17	6	18	9	20	0
5	3	0	15	9	17	0¾	18	4½	19	8¼	21	0
5	6	0	16	6	17	10½	19	3	20	7½	22	0
5	9	0	17	3	18	8¼	20	1½	21	6¾	23	0
6	0	0	18	0	19	6	21	0	22	6	24	0
6	3	0	18	9	20	3¾	21	10½	23	5¼	25	0
6	6	0	19	6	21	1½	22	9	24	4½	26	0

TABLE XII.

SHOWING THE VALUE OF SAWYERS' WORK AT A GIVEN RATE PER 100 SUPERFICIAL OR SQUARE FEET.

EXPLANATION OF THE TABLE.

THE following table shows the value of sawing from 1 to 8000 feet, and is, with four or five exceptions, at all the prices paid at the present time for sawing any sort of timber.

The first or left hand column of each page contains the number of feet. The other columns contain the value of each number in the first column, at the price or rate on the top of each.

Note.—Beside showing the value of sawing, this table will be useful as exhibiting the value or price of any number of articles, either sold or manufactured at a given price per hundred.

EXAMPLES.

1. Required the charge for sawing 566 feet yellow pine, at 2*s.* 9*d.* per 100 feet?

Look along the top of the pages for 2*s.* 9*d.*, under which and opposite 500 feet, stands . . £0 13 9

— 60 — — . . . 0 1 7¾

— 6 — — . . 0 0 2

total, 566 charge, £0 15 6¾

2. Required the cost of sawing 390 feet of saugh, under 12 inches deep, at 4*s.* 6*d.* per 100 feet?

Under 4*s.* 6*d.*, and opposite 300 feet stands £0 13 6

— 90 — — 0 4 0½

total, 390 cost, £0 17 6½

Subjoined is a list of the prices at present paid for sawing, as also a copy of a sawyer's bill, charged according to these rates.

LIST OF PRICES

OF HAND-FRAME SAWING IN GLASGOW, 1861.

	Per 100 Feet.
PINES, LARCH, &C.	
American Yellow Pine,	£0 2 9
Do. Red, White, and Memel,	0 3 0
Scotch Spruce and Silver Firs,	0 3 3
Red and White Pine, from Stettin, Bremen, and other Baltic Ports, except Memel,	0 3 6
Larch, Hemlock, and Hicmatic,	0 3 9
Pitch Pine,	0 4 2
ROUND HARDWOOD.	
Ash, Beech, Birch, Horse Chestnut, Elm, Planetree, and Oak (home grown), under 20 in. centre cut,	£0 6 3
The above Woods, 20 inches and upwards,	0 8 4
Willow, Alder, and Limetree, under 12 inches the centre cut, 4*s.* 6*d.*, 12 inches and upwards,	0 5 0
Hornbeam, Holland, Greenheart, Fruit Tree, and Teak Wood,	0 8 4
Butternut,	0 4 2
American Ash, if cut to sizes at and under 1 inch in thickness, 5*s.*, if above that size,	0 5 6
American Elm and Wainscot Oak,	0 5 6
American Birch, American and Continental Oaks, squared, and Hickory Logs,	0 6 3
AMERICAN WALNUT AND HONDURAS MAHOGANY.	
Under 2 feet deep,	£0 6 3
2 feet and under 2 feet 3 inch,	0 7 0
2 feet 3 inch, and under 2 feet 6 inch,	0 8 4
2 „ 6 „ „ 2 „ 9 „	0 10 5
2 „ 9 „ „ 3 „	0 12 6
3 feet, and under 3 feet 6 inch,	0 14 7
3 feet 6 inch, and under 4 feet,	0 16 8
ST. DOMINGO AND CUBA MAHOGANY.	
Under 2 feet deep,	£0 7 0
2 feet, and under 2 feet 6 inch,	0 8 4
2 feet 6 inches, and under 3 feet	0 12 6
3 feet, and under 3 feet 6 inch,	0 14 7
3 feet 6 inch, and under 4 feet,	0 18 9
AFRICAN MAHOGANY, AND BRITISH, FRENCH, SPANISH, AND CIRCASSIAN WALNUT.	
Under 2 feet deep,	£0 8 4

To rise one farthing per foot for every three inches the above woods rise in depth.

FORM OF A SAWYER'S BILL.

Glasgow, 28*th October*, 1861.

Mr. ARCHIBALD WRIGHT,

TO JOHN & JAMES SAWERS.

	Mark and No.	Length. Ft.	In.	Breadth. Ft.	In.	Content. Feet.	Total Content. Ft.	In.	Rate.	Price. £	s.	d.
Birch	2 PG 19	20	0	15	0	300						
Cut of ditto		15	0	12	0	180						
Cross-cutting ditto, 18 inches						18						
							498	0	5/6	1	7	4¾
American oak	AG 13	32	6	10	0	...	325	0	6/3	1	0	3¾
Round beech, above 20 inches		15	0	27	0	...	405	0	8/4	1	13	9
Honduras mahogany, at 29 inches		12	0	12	1	...	145	0	8/4	0	12	1
Spanish ditto at 34 inches		8	0	10	6	...	84	0	12/6	0	10	6
Yellow pine	1 BB 35	22	6	39	0	...	877	6	2/9	1	4	1¼
White pine plank		20	0	30	0	...	600	0	3/	0	18	0
										7	6	1¾
Off discount 10 per cent	...	...		...		...	...		...	0	14	7¼
										6	11	6½
Two men jobbing, 2 days, each of 10 hours, at 5*d.* per hour = 4/2	...	...		...		...	...		8/4	0	16	8
										7	8	2½

Received payment,

JOHN & JAMES SAWERS.

Feet.	6d. per 100.		1s. per 100.			1s. 6d. per 100.			1s. 9d. per 100.			2s. per 100.		
	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	0	0	0	0	0	0¼	0	0	0¼	0	0	0¼
2	0	0	0	0	0¼	0	0	0½	0	0	0½	0	0	0½
3	0	0¼	0	0	0½	0	0	0¾	0	0	0¾	0	0	0¾
4	0	0½	0	0	0¾	0	0	1	0	0	1	0	0	1
5	0	0¾	0	0	1	0	0	1¼	0	0	1¼	0	0	1¼
6	0	1	0	0	1¼	0	0	1½	0	0	1½	0	0	1½
7	0	1¼	0	0	1½	0	0	1¾	0	0	1¾	0	0	1¾
8	0	1½	0	0	1¾	0	0	2	0	0	2	0	0	2
9	0	1¾	0	0	2	0	0	2¼	0	0	2¼	0	0	2¼
10	0	2	0	0	2¼	0	0	2½	0	0	2½	0	0	2½
11	0	2¼	0	0	2½	0	0	2¾	0	0	2¾	0	0	2¾
12	0	2½	0	0	2¾	0	0	3	0	0	3	0	0	3
13	0	2¾	0	0	3	0	0	3¼	0	0	3¼	0	0	3¼
14	0	3	0	0	3¼	0	0	3½	0	0	3½	0	0	3½
15	0	3¼	0	0	3½	0	0	3¾	0	0	3¾	0	0	3¾
16	0	3½	0	0	3¾	0	0	4	0	0	4	0	0	4
17	0	3¾	0	0	4	0	0	4¼	0	0	4¼	0	0	4¼
18	0	4	0	0	4¼	0	0	4½	0	0	4½	0	0	4½
19	0	4¼	0	0	4½	0	0	4¾	0	0	4¾	0	0	4¾
20	0	4½	0	0	4¾	0	0	5	0	0	5	0	0	5
30	0	6¾	0	0	7	0	0	7½	0	0	7¾	0	0	8
40	0	9	0	0	9½	0	0	10	0	0	10½	0	0	11
50	0	11¼	0	0	11¾	0	0	12½	0	0	13¼	0	0	14
60	0	13½	0	0	14¼	0	0	15	0	0	15¾	0	0	16
70	0	15¾	0	0	16½	0	0	17½	0	0	18¼	0	0	19
80	0	18	0	0	18¾	0	0	20	0	0	21	0	0	22
90	0	20¼	0	0	21	0	0	22½	0	0	23¾	0	0	25
100	0	22½	0	0	23¼	0	0	25	0	0	26¼	0	0	27½
200	0	45	0	0	46½	0	0	50	0	0	52½	0	0	55
300	0	67½	0	0	70	0	0	75	0	0	78¾	0	0	82½
400	0	90	0	0	93¾	0	0	100	0	0	105	0	0	110
500	0	112½	0	0	117	0	0	125	0	0	131¼	0	0	137½
600	0	135	0	0	140¼	0	0	150	0	0	157½	0	0	165
700	0	157½	0	0	163½	0	0	175	0	0	183¾	0	0	192½
800	0	180	0	0	186¾	0	0	200	0	0	210	0	0	220
900	0	202½	0	0	210	0	0	225	0	0	236¼	0	0	247½
1000	0	225	0	0	233¾	0	0	250	0	0	262½	0	0	275
2000	0	450	0	0	467½	0	0	500	0	0	525	0	0	550
3000	0	675	0	0	701¼	0	0	750	0	0	787½	0	0	825
4000	0	900	0	0	935	0	0	1000	0	0	1050	0	0	1100
5000	0	1125	0	0	1168¾	0	0	1250	0	0	1312½	0	0	1375
6000	0	1350	0	0	1402½	0	0	1500	0	0	1575	0	0	1650
7000	0	1575	0	0	1636¼	0	0	1750	0	0	1837½	0	0	1925
8000	0	1800	0	0	1870	0	0	2000	0	0	2100	0	0	2200

Feet.	2s. 1d. per 100.			2s. 2d. per 100.			2s. 3d. per 100.			2s. 4d. per 100.			2s. 5d. per 100.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	0 1/4	0	0	0 1/4	0	0	0 1/4	0	0	0 1/4	0	0	0 1/4
2	0	0	0 1/2	0	0	0 1/2	0	0	0 1/2	0	0	0 1/2	0	0	0 1/2
3	0	0	0 3/4	0	0	0 3/4	0	0	0 3/4	0	0	0 3/4	0	0	0 3/4
4	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1 1/4
5	0	0	1 1/4	0	0	1 1/4	0	0	1 1/4	0	0	1 1/4	0	0	1 1/2
6	0	0	1 1/2	0	0	1 1/2	0	0	1 1/2	0	0	1 1/2	0	0	1 3/4
7	0	0	1 3/4	0	0	1 3/4	0	0	2	0	0	2	0	0	2
8	0	0	2	0	0	2	0	0	2 1/4	0	0	2 1/4	0	0	2 1/4
9	0	0	2 1/4	0	0	2 1/4	0	0	2 1/2	0	0	2 1/2	0	0	2 1/2
10	0	0	2 1/2	0	0	2 1/2	0	0	2 3/4	0	0	2 3/4	0	0	3
11	0	0	2 3/4	0	0	2 3/4	0	0	3	0	0	3	0	0	3 1/4
12	0	0	3	0	0	3	0	0	3 1/4	0	0	3 1/4	0	0	3 1/2
13	0	0	3 1/4	0	0	3 1/4	0	0	3 1/2	0	0	3 1/2	0	0	3 3/4
14	0	0	3 1/2	0	0	3 1/2	0	0	3 3/4	0	0	4	0	0	4
15	0	0	3 3/4	0	0	4	0	0	4	0	0	4 1/4	0	0	4 1/4
16	0	0	4	0	0	4 1/4	0	0	4 1/4	0	0	4 1/2	0	0	4 3/4
17	0	0	4 1/4	0	0	4 1/2	0	0	4 1/2	0	0	4 3/4	0	0	5
18	0	0	4 1/2	0	0	4 1/2	0	0	4 3/4	0	0	5	0	0	5 1/4
19	0	0	4 3/4	0	0	5	0	0	5 1/4	0	0	5 1/4	0	0	5 1/2
20	0	0	5	0	0	5 1/4	0	0	5 1/2	0	0	5 1/2	0	0	5 3/4
30	0	0	7 1/2	0	0	7 1/2	0	0	8	0	0	8 1/2	0	0	8 3/4
40	0	0	10	0	0	10 1/2	0	0	10 3/4	0	0	11 1/4	0	0	11 1/2
50	0	1	0 1/2	0	1	1	0	1	1 1/2	0	1	2	0	1	2 1/2
60	0	1	3	0	1	3 1/2	0	1	4 1/4	0	1	4 3/4	0	1	5 1/2
70	0	1	5 1/2	0	1	6 1/4	0	1	7	0	1	7 1/2	0	1	8 1/4
80	0	1	8	0	1	8 3/4	0	1	9 1/2	0	1	10 1/2	0	1	11 1/4
90	0	1	10 1/2	0	1	11 1/2	0	2	0 1/4	0	2	1 1/4	0	2	2
100	0	2	1	0	2	2	0	2	3	0	2	4	0	2	5
200	0	4	2	0	4	4	0	4	6	0	4	8	0	4	10
300	0	6	3	0	6	6	0	6	9	0	7	0	0	7	3
400	0	8	4	0	8	8	0	9	0	0	9	4	0	9	8
500	0	10	5	0	10	10	0	11	3	0	11	8	0	12	1
600	0	12	6	0	13	0	0	13	6	0	14	0	0	14	6
700	0	14	7	0	15	2	0	15	9	0	16	4	0	16	11
800	0	16	8	0	17	4	0	18	0	0	18	8	0	19	4
900	0	18	9	0	19	6	1	0	3	1	1	0	1	1	9
1000	1	0	10	1	1	8	1	2	6	1	3	4	1	4	2
2000	2	1	8	2	3	4	2	5	0	2	6	8	2	8	4
3000	3	2	6	3	5	0	3	7	6	3	10	0	3	12	6
4000	4	3	4	4	6	8	4	10	0	4	13	4	4	16	8
5000	5	4	2	5	8	4	5	12	6	5	16	8	6	0	10
6000	6	5	0	6	10	0	6	15	0	7	0	0	7	5	0
7000	7	5	10	7	11	8	7	17	6	8	3	4	8	9	2
8000	8	6	8	8	13	4	9	0	0	9	6	8	9	13	4

Feet.	2s. 6d. per 100.			2s. 7d. per 100.			2s. 8d. per 100.			2s. 9d. per 100.			2s. 10d. per 100.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	0¼	0	0	0¼	0	0	0¼	0	0	0¼	0	0	0¼
2	0	0	0½	0	0	0½	0	0	0¾	0	0	0¾	0	0	0¾
3	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1
4	0	0	1¼	0	0	1¼	0	0	1¼	0	0	1¼	0	0	1¼
5	0	0	1½	0	0	1½	0	0	1½	0	0	1¾	0	0	1¾
6	0	0	1¾	0	0	1¾	0	0	2	0	0	2	0	0	2
7	0	0	2	0	0	2¼	0	0	2¼	0	0	2¼	0	0	2½
8	0	0	2½	0	0	2½	0	0	2½	0	0	2¾	0	0	2¾
9	0	0	2¾	0	0	2¾	0	0	3	0	0	3	0	0	3
10	0	0	3	0	0	3	0	0	3½	0	0	3¼	0	0	3½
11	0	0	3¼	0	0	3½	0	0	3½	0	0	3¾	0	0	3¾
12	0	0	3½	0	0	3¾	0	0	3¾	0	0	4	0	0	4
13	0	0	4	0	0	4	0	0	4¼	0	0	4¼	0	0	4½
14	0	0	4¼	0	0	4¼	0	0	4½	0	0	4½	0	0	4¾
15	0	0	4½	0	0	4¾	0	0	4¾	0	0	5	0	0	5
16	0	0	4¾	0	0	5	0	0	5	0	0	5¼	0	0	5½
17	0	0	5	0	0	5¼	0	0	5½	0	0	5½	0	0	5¾
18	0	0	5½	0	0	5½	0	0	5¾	0	0	6	0	0	6
19	0	0	5¾	0	0	6	0	0	6	0	0	6¼	0	0	6½
20	0	0	6	0	0	6¼	0	0	6½	0	0	6½	0	0	6¾
30	0	0	9	0	0	9¼	0	0	9½	0	0	10	0	0	10¼
40	0	1	0	0	1	0½	0	1	0¾	0	1	1¼	0	1	1½
50	0	1	3	0	1	3½	0	1	4	0	1	4½	0	1	5
60	0	1	6	0	1	6½	0	1	7¼	0	1	7¾	0	1	8½
70	0	1	9	0	1	9¾	0	1	10½	0	1	11	0	1	11¾
80	0	2	0	0	2	0¾	0	2	1½	0	2	2½	0	2	3¼
90	0	2	3	0	2	4	0	2	4¾	0	2	5¾	0	2	6½
100	0	2	6	0	2	7	0	2	8	0	2	9	0	2	10
200	0	5	0	0	5	2	0	5	4	0	5	6	0	5	8
300	0	7	6	0	7	9	0	8	0	0	8	3	0	8	6
400	0	10	0	0	10	4	0	10	8	0	11	0	0	11	4
500	0	12	6	0	12	11	0	13	4	0	13	9	0	14	2
600	0	15	0	0	15	6	0	16	0	0	16	6	0	17	0
700	0	17	6	0	18	1	0	18	8	0	19	3	0	19	10
800	1	0	0	1	0	8	1	1	4	1	2	0	1	2	8
900	1	2	6	1	3	3	1	4	0	1	4	9	1	5	6
1000	1	5	0	1	5	10	1	6	8	1	7	6	1	8	4
2000	2	10	0	2	11	8	2	13	4	2	15	0	2	16	8
3000	3	15	0	3	17	6	4	0	0	4	2	6	4	5	0
4000	5	0	0	5	3	4	5	6	8	5	10	0	5	13	4
5000	6	5	0	6	9	2	6	13	4	6	17	6	7	1	8
6000	7	10	0	7	15	0	8	0	0	8	5	0	8	10	0
7000	8	15	0	9	0	10	9	6	8	9	12	6	9	18	4
8000	10	0	0	10	6	8	10	13	4	11	0	0	11	6	8

Feet.	2s. 11d. per 100.			3s. per 100.			3s. 3d. per 100.			3s. 4d. per 100.			3s. 6d. per 100.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	0¼	0	0	0¼	0	0	0½	0	0	0½	0	0	0½
2	0	0	0¾	0	0	0¾	0	0	0¾	0	0	0¾	0	0	0¾
3	0	0	1	0	0	1	0	0	1¼	0	0	1¼	0	0	1¼
4	0	0	1½	0	0	1½	0	0	1½	0	0	1½	0	0	1¾
5	0	0	1¾	0	0	1¾	0	0	2	0	0	2	0	0	2
6	0	0	2	0	0	2¼	0	0	2¼	0	0	2½	0	0	2½
7	0	0	2½	0	0	2½	0	0	2¾	0	0	2¾	0	0	3
8	0	0	2¾	0	0	3	0	0	3	0	0	3¼	0	0	3¼
9	0	0	3¼	0	0	3¼	0	0	3½	0	0	3½	0	0	3¾
10	0	0	3½	0	0	3½	0	0	4	0	0	4	0	0	4¼
11	0	0	3¾	0	0	4	0	0	4¼	0	0	4½	0	0	4½
12	0	0	4¼	0	0	4¼	0	0	4¾	0	0	4¾	0	0	5
13	0	0	4½	0	0	4¾	0	0	5	0	0	5¼	0	0	5¼
14	0	0	5	0	0	5	0	0	5½	0	0	5½	0	0	6
15	0	0	5¼	0	0	5½	0	0	5¾	0	0	6	0	0	6¼
16	0	0	5½	0	0	5¾	0	0	6¼	0	0	6½	0	0	6¾
17	0	0	6	0	0	6	0	0	6¾	0	0	6¾	0	0	7¼
18	0	0	6¼	0	0	6¼	0	0	7	0	0	7¼	0	0	7½
19	0	0	6¾	0	0	6¾	0	0	7½	0	0	7½	0	0	8
20	0	0	7	0	0	7¼	0	0	7¾	0	0	8	0	0	8¼
30	0	0	10½	0	0	10¾	0	0	11¾	0	1	0	0	1	0½
40	0	1	2	0	1	2½	0	1	3½	0	1	4	0	1	4½
50	0	1	5½	0	1	6	0	1	7½	0	1	8	0	1	9
60	0	1	9	0	1	9½	0	1	11½	0	2	0	0	2	1¼
70	0	2	0½	0	2	1¼	0	2	3¼	0	2	4	0	2	5½
80	0	2	4	0	2	4¾	0	2	7¼	0	2	8	0	2	9½
90	0	2	7½	0	2	8½	0	2	11	0	3	0	0	3	1¾
100	0	2	11	0	3	0	0	3	3	0	3	4	0	3	6
200	0	5	10	0	6	0	0	6	6	0	6	8	0	7	0
300	0	8	9	0	9	0	0	9	9	0	10	0	0	10	6
400	0	11	8	0	12	0	0	13	0	0	13	4	0	14	0
500	0	14	7	0	15	0	0	16	3	0	16	8	0	17	6
600	0	17	6	0	18	0	0	19	6	1	0	0	1	1	0
700	1	0	5	1	1	0	1	2	9	1	3	4	1	4	6
800	1	3	4	1	4	0	1	6	0	1	6	8	1	8	0
900	1	6	3	1	7	0	1	9	3	1	10	0	1	11	6
1000	1	9	2	1	10	0	1	12	6	1	13	4	1	15	0
2000	2	18	4	3	0	0	3	5	0	3	6	8	3	10	0
3000	4	7	6	4	10	0	4	17	6	5	0	0	5	5	0
4000	5	16	8	6	0	0	6	10	0	6	13	4	7	0	0
5000	7	5	10	7	10	0	8	2	6	8	6	8	8	15	0
6000	8	15	0	9	0	0	9	15	0	10	0	0	10	10	0
7000	10	4	2	10	10	0	11	7	6	11	13	4	12	5	0
8000	11	13	4	12	0	0	13	0	0	13	6	8	14	0	0

Feet.	3s. 7d. per 100.			3s. 9d. per 100.			4s. per 100.			4s. 2d. per 100.			4s. 3d. per 100.		
	£	s.	d	£	s.	d.	£	s.	d.	£	s.	d	£	s.	d.
1	0	0	0½	0	0	0½	0	0	0½	0	0	0½	0	0	0½
2	0	0	0¾	0	0	1	0	0	1	0	0	1	0	0	1
3	0	0	1¼	0	0	1¼	0	0	1½	0	0	1½	0	0	1½
4	0	0	1¾	0	0	1¾	0	0	2	0	0	2	0	0	2
5	0	0	2¼	0	0	2¼	0	0	2½	0	0	2½	0	0	2½
6	0	0	2½	0	0	2¾	0	0	3	0	0	3	0	0	3
7	0	0	3	0	0	3¼	0	0	3¼	0	0	3½	0	0	3½
8	0	0	3½	0	0	3½	0	0	3¾	0	0	4	0	0	4
9	0	0	3¾	0	0	4	0	0	4¼	0	0	4½	0	0	4½
10	0	0	4¼	0	0	4½	0	0	4¾	0	0	5	0	0	5
11	0	0	4¾	0	0	5	0	0	5¼	0	0	5½	0	0	5½
12	0	0	5¼	0	0	5½	0	0	5¾	0	0	6	0	0	6
13	0	0	5½	0	0	5¾	0	0	6¼	0	0	6½	0	0	6¾
14	0	0	6	0	0	6¼	0	0	6¾	0	0	7	0	0	7¼
15	0	0	6½	0	0	6¾	0	0	7¼	0	0	7½	0	0	7¾
16	0	0	7	0	0	7¼	0	0	7¾	0	0	8	0	0	8¼
17	0	0	7¼	0	0	7¾	0	0	8¼	0	0	8½	0	0	8¾
18	0	0	7¾	0	0	8	0	0	8¾	0	0	9	0	0	9¼
19	0	0	8¼	0	0	8½	0	0	9	0	0	9½	0	0	9¾
20	0	0	8½	0	0	9	0	0	9½	0	0	10	0	0	10¼
30	0	1	1	0	1	1½	0	1	2½	0	1	3	0	1	3¼
40	0	1	5¼	0	1	6	0	1	7¼	0	1	8	0	1	8½
50	0	1	9½	0	1	10½	0	2	0	0	2	1	0	2	1½
60	0	2	1¾	0	2	3	0	2	4¾	0	2	6	0	2	6½
70	0	2	6	0	2	7½	0	2	9½	0	2	11	0	2	11¾
80	0	2	10½	0	3	0	0	3	2½	0	3	4	0	3	4¾
90	0	3	2¾	0	3	4½	0	3	7¼	0	3	9	0	3	10
100	0	3	7	0	3	9	0	4	0	0	4	2	0	4	3
200	0	7	2	0	7	6	0	8	0	0	8	4	0	8	6
300	0	10	9	0	11	3	0	12	0	0	12	6	0	12	9
400	0	14	4	0	15	0	0	16	0	0	16	8	0	17	0
500	0	17	11	0	18	9	1	0	0	1	0	10	1	1	3
600	1	1	6	1	2	6	1	4	0	1	5	0	1	5	6
700	1	5	1	1	6	3	1	8	0	1	9	2	1	9	9
800	1	8	8	1	10	0	1	12	0	1	13	4	1	14	0
900	1	12	3	1	13	9	1	16	0	1	17	6	1	18	3
1000	1	15	10	1	17	6	2	0	0	2	1	8	2	2	6
2000	3	11	8	3	15	0	4	0	0	4	3	4	4	5	0
3000	5	7	6	5	12	6	6	0	0	6	5	0	6	7	6
4000	7	3	4	7	10	0	8	0	0	8	6	8	8	10	0
5000	8	19	2	9	7	6	10	0	0	10	8	4	10	12	6
6000	10	15	0	11	5	0	12	0	0	12	10	0	12	15	0
7000	12	10	10	13	2	6	14	0	0	14	11	8	14	17	6
8000	14	6	8	15	0	0	16	0	0	16	13	4	17	0	0

Feet.	4s. 6d. per 100.			4s. 9d. per 100.			5s. per 100.			5s. 3d. per 100.			5s. 6d. per 100.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	0½	0	0	0½	0	0	0½	0	0	0¾	0	0	0¾
2	0	0	1	0	0	1¼	0	0	1¼	0	0	1¼	0	0	1¼
3	0	0	1½	0	0	1¾	0	0	1¾	0	0	2	0	0	2
4	0	0	2¼	0	0	2¼	0	0	2½	0	0	2½	0	0	2¾
5	0	0	2¾	0	0	2¾	0	0	3	0	0	3¼	0	0	3½
6	0	0	3¼	0	0	3½	0	0	3½	0	0	3¾	0	0	4
7	0	0	3¾	0	0	4	0	0	4¼	0	0	4½	0	0	4½
8	0	0	4¼	0	0	4½	0	0	4¾	0	0	5	0	0	5¼
9	0	0	4¾	0	0	5¼	0	0	5½	0	0	5¾	0	0	6
10	0	0	5½	0	0	5¾	0	0	6	0	0	6¼	0	0	6½
11	0	0	6	0	0	6¼	0	0	6½	0	0	7	0	0	7¼
12	0	0	6½	0	0	6¾	0	0	7¼	0	0	7½	0	0	8
13	0	0	7	0	0	7½	0	0	7¾	0	0	8¼	0	0	8½
14	0	0	7½	0	0	8	0	0	8½	0	0	8¾	0	0	9¼
15	0	0	8	0	0	8½	0	0	9	0	0	9½	0	0	10
16	0	0	8¾	0	0	9	0	0	9½	0	0	10	0	0	10½
17	0	0	9¼	0	0	9¾	0	0	10¼	0	0	10¾	0	0	11¼
18	0	0	9¾	0	0	10¼	0	0	10¾	0	0	11¼	0	1	0
19	0	0	10¼	0	0	10¾	0	0	11½	0	1	0	0	1	0½
20	0	0	10¾	0	0	11½	0	1	0	0	1	0½	0	1	1¼
30	0	1	4¼	0	1	5	0	1	6	0	1	7	0	1	7¾
40	0	1	9½	0	1	10¾	0	2	0	0	2	1¼	0	2	2½
50	0	2	3	0	2	4½	0	2	6	0	2	7½	0	2	9
60	0	2	8½	0	2	10¼	0	3	0	0	3	1¾	0	3	3½
70	0	3	1¾	0	3	4	0	3	6	0	3	8	0	3	10¼
80	0	3	7¼	0	3	9½	0	4	0	0	4	2½	0	4	4¾
90	0	4	0½	0	4	3¼	0	4	6	0	4	8¾	0	4	11½
100	0	4	6	0	4	9	0	5	0	0	5	3	0	5	6
200	0	9	0	0	9	6	0	10	0	0	10	6	0	11	0
300	0	13	6	0	14	3	0	15	0	0	15	9	0	16	6
400	0	18	0	0	19	0	1	0	0	1	1	0	1	2	0
500	1	2	6	1	3	9	1	5	0	1	6	3	1	7	6
600	1	7	0	1	8	6	1	10	0	1	11	6	1	13	0
700	1	11	6	1	13	3	1	15	0	1	16	9	1	18	6
800	1	16	0	1	18	0	2	0	0	2	2	0	2	4	0
900	2	0	6	2	2	9	2	5	0	2	7	3	2	9	6
1000	2	5	0	2	7	6	2	10	0	2	12	6	2	15	0
2000	4	10	0	4	15	0	5	0	0	5	5	0	5	10	0
3000	6	15	0	7	2	6	7	10	0	7	17	6	8	5	6
4000	9	0	0	9	10	0	10	0	0	10	10	0	11	0	0
5000	11	5	0	11	17	6	12	10	0	13	2	6	13	15	0
6000	13	10	0	14	5	0	15	0	0	15	15	0	16	10	0
7000	15	15	0	16	12	6	17	10	0	18	7	6	19	5	0
8000	18	0	0	19	0	0	20	0	0	21	0	0	22	0	0

Feet.	5s. 9d. per 100.			6s. per 100.			6s. 3d. per 100.			6s. 6d. per 100.			6s. 9d. per 100.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	0 3/4	0	0	0 3/4	0	0	0 3/4	0	0	0 3/4	0	0	0 3/4
2	0	0	1 1/2	0	0	1 1/2	0	0	1 1/2	0	0	1 1/2	0	0	1 1/2
3	0	0	2	0	0	2 1/4	0	0	2 1/4	0	0	2 1/4	0	0	2 1/2
4	0	0	2 3/4	0	0	3	0	0	3	0	0	3	0	0	3 1/4
5	0	0	3 1/2	0	0	3 1/2	0	0	3 3/4	0	0	4	0	0	4
6	0	0	4 1/4	0	0	4 1/4	0	0	4 1/2	0	0	4 3/4	0	0	4 3/4
7	0	0	4 3/4	0	0	5	0	0	5 1/4	0	0	5 1/2	0	0	5 3/4
8	0	0	5 1/2	0	0	5 3/4	0	0	6	0	0	6 1/4	0	0	6 1/2
9	0	0	6 1/4	0	0	6 1/2	0	0	6 3/4	0	0	7	0	0	7 1/4
10	0	0	7	0	0	7 1/4	0	0	7 1/2	0	0	7 3/4	0	0	8
11	0	0	7 1/2	0	0	8	0	0	8 1/4	0	0	8 1/2	0	0	9
12	0	0	8 1/4	0	0	8 3/4	0	0	9	0	0	9 1/4	0	0	9 3/4
13	0	0	9	0	0	9 1/4	0	0	9 3/4	0	0	10 1/4	0	0	10 1/2
14	0	0	9 3/4	0	0	10	0	0	10 1/2	0	0	11	0	0	11 1/4
15	0	0	10 1/4	0	0	10 3/4	0	0	11 1/4	0	0	11 3/4	0	1	0 1/4
16	0	0	11	0	0	11 1/2	0	1	0	0	1	0 1/2	0	1	1
17	0	0	11 3/4	0	1	0 1/4	0	1	0 3/4	0	1	1 1/4	0	1	1 3/4
18	0	1	0 1/2	0	1	1	0	1	1 1/2	0	1	2	0	1	2 1/2
19	0	1	1	0	1	1 3/4	0	1	2 1/4	0	1	2 3/4	0	1	3 1/2
20	0	1	1 3/4	0	1	2 1/2	0	1	3	0	1	3 1/2	0	1	4 1/4
30	0	1	8 3/4	0	1	9 1/2	0	1	10 1/2	0	1	11 1/2	0	2	0 1/4
40	0	2	3 1/2	0	2	4 1/4	0	2	6	0	2	7 1/4	0	2	8 1/2
50	0	2	10 1/4	0	3	0	0	3	1 1/2	0	3	3	0	3	4 1/2
60	0	3	5 1/2	0	3	7 1/4	0	3	9	0	3	10 3/4	0	4	0 1/2
70	0	4	0 1/4	0	4	2 1/2	0	4	4 1/2	0	4	6 1/2	0	4	8 3/4
80	0	4	7 1/4	0	4	9 1/2	0	5	0	0	5	2 1/2	0	5	4 3/4
90	0	5	2	0	5	4 3/4	0	5	7 1/2	0	5	10 1/4	0	6	1
100	0	5	9	0	6	0	0	6	3	0	6	6	0	6	9
200	0	11	6	0	12	0	0	12	6	0	13	0	0	13	6
300	0	17	3	0	18	0	0	18	9	0	19	6	1	0	3
400	1	3	0	1	4	0	1	5	0	1	6	0	1	7	0
500	1	8	9	1	10	0	1	11	3	1	12	6	1	13	9
600	1	14	6	1	16	0	1	17	6	1	19	0	2	0	6
700	2	0	3	2	2	0	2	3	9	2	5	6	2	7	3
800	2	6	0	2	8	0	2	10	0	2	12	0	2	14	0
900	2	11	9	2	14	0	2	16	3	2	18	6	3	0	9
1000	2	17	6	3	0	0	3	2	6	3	5	0	3	7	6
2000	5	15	0	6	0	0	6	5	0	6	10	0	6	15	0
3000	8	12	6	9	0	0	9	7	6	9	15	0	10	2	6
4000	11	10	0	12	0	0	12	10	0	13	0	0	13	10	0
5000	14	7	6	15	0	0	15	12	6	16	5	0	16	17	6
6000	17	5	0	18	0	0	18	15	0	19	10	0	20	5	0
7000	20	2	6	21	0	0	21	17	6	22	15	0	23	12	6
8000	23	0	0	24	0	0	25	0	0	26	0	0	27	0	0

Feet.	7s. per 100.			7s. 6d. per 100.			8s. per 100.			8s. 4d. per 100.			8s. 6d. per 100.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	0¾	0	0	1	0	0	1	0	0	1	0	0	1
2	0	0	1¾	0	0	1¾	0	0	2	0	0	2	0	0	2
3	0	0	2½	0	0	2¾	0	0	3	0	0	3	0	0	3
4	0	0	3¼	0	0	3½	0	0	3¾	0	0	4	0	0	4
5	0	0	4¼	0	0	4½	0	0	4¾	0	0	5	0	0	5
6	0	0	5	0	0	5½	0	0	5¾	0	0	6	0	0	6
7	0	0	6	0	0	6¼	0	0	6¾	0	0	7	0	0	7¼
8	0	0	6¾	0	0	7¼	0	0	7¾	0	0	8	0	0	8¼
9	0	0	7½	0	0	8	0	0	8¾	0	0	9	0	0	9¼
10	0	0	8½	0	0	9	0	0	9½	0	0	10	0	0	10¼
11	0	0	9¼	0	0	10	0	0	10½	0	0	11	0	0	11¼
12	0	0	10	0	0	10¾	0	0	11½	0	1	0	0	1	0¼
13	0	0	11	0	0	11¾	0	1	0½	0	1	1	0	1	1¼
14	0	0	11¾	0	1	0½	0	1	1½	0	1	2	0	1	2¼
15	0	1	0½	0	1	1½	0	1	2½	0	1	3	0	1	3¼
16	0	1	1½	0	1	2½	0	1	3¼	0	1	4	0	1	4¼
17	0	1	2¼	0	1	3¼	0	1	4¼	0	1	5	0	1	5¼
18	0	1	3	0	1	4¼	0	1	5¼	0	1	6	0	1	6¼
19	0	1	4	0	1	5	0	1	6¼	0	1	7	0	1	7¼
20	0	1	4¾	0	1	6	0	1	7¼	0	1	8	0	1	8¼
30	0	2	1¼	0	2	3	0	2	4¼	0	2	6	0	2	6½
40	0	2	9½	0	3	0	0	3	2½	0	3	4	0	3	4¼
50	0	3	6	0	3	9	0	4	0	0	4	2	0	4	3
60	0	4	2½	0	4	6	0	4	9½	0	5	0	0	5	1¼
70	0	4	10¾	0	5	3	0	5	7¼	0	5	10	0	5	11½
80	0	5	7¼	0	6	0	0	6	4¾	0	6	8	0	6	9¾
90	0	6	3½	0	6	9	0	7	2½	0	7	6	0	7	7¾
100	0	7	0	0	7	6	0	8	0	0	8	4	0	8	6
200	0	14	0	0	15	0	0	16	0	0	16	8	0	17	0
300	1	1	0	1	2	6	1	4	0	1	5	0	1	5	6
400	1	8	0	1	10	0	1	12	0	1	13	4	1	14	0
500	1	15	0	1	17	6	2	0	0	2	1	8	2	2	6
600	2	2	0	2	5	0	2	8	0	2	10	0	2	11	0
700	2	9	0	2	12	6	2	16	0	2	18	4	2	19	6
800	2	16	0	3	0	0	3	4	0	3	6	8	3	8	0
900	3	3	0	3	7	6	3	12	0	3	15	0	3	16	6
1000	3	10	0	3	15	0	4	0	0	4	3	4	4	5	0
2000	7	0	0	7	10	0	8	0	0	8	6	8	8	10	0
3000	10	10	0	11	5	0	12	0	0	12	10	0	12	15	0
4000	14	0	0	15	0	0	16	0	0	16	13	4	17	0	0
5000	17	10	0	18	15	0	20	0	0	20	16	8	21	5	0
6000	21	0	0	22	10	0	24	0	0	25	0	0	25	10	0
7000	24	10	0	26	5	0	28	0	0	29	3	4	29	15	0
8000	28	0	0	30	0	0	32	0	0	33	6	8	34	0	0

Feet.	9s. per 100.			9s. 6d. per 100.			10s. per 100.			10s. 5d. per 100.			10s. 6d. per 100.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d	£	s.	d.
1	0	0	1	0	0	1¼	0	0	1¼	0	0	1¼	0	0	1¼
2	0	0	2¼	0	0	2¼	0	0	2½	0	0	2½	0	0	2½
3	0	0	3¼	0	0	3½	0	0	3½	0	0	3¾	0	0	3¾
4	0	0	4¼	0	0	4½	0	0	4¾	0	0	5	0	0	5
5	0	0	5½	0	0	5¾	0	0	6	0	0	6¼	0	0	6¼
6	0	0	6½	0	0	6¾	0	0	7¼	0	0	7½	0	0	7½
7	0	0	7½	0	0	8	0	0	8½	0	0	8¾	0	0	8¾
8	0	0	8¾	0	0	9	0	0	9½	0	0	10	0	0	10
9	0	0	9¾	0	0	10¼	0	0	10¾	0	0	11¼	0	0	11¼
10	0	0	10¾	0	0	11½	0	1	0	0	1	0½	0	1	0½
11	0	1	0	0	1	0½	0	1	1¼	0	1	1¾	0	1	1¾
12	0	1	1	0	1	1½	0	1	2½	0	1	3	0	1	3
13	0	1	2	0	1	2¾	0	1	3½	0	1	4¼	0	1	4½
14	0	1	3	0	1	4	0	1	4¾	0	1	5½	0	1	5¾
15	0	1	4¼	0	1	5	0	1	6	0	1	6¾	0	1	7
16	0	1	5¼	0	1	6¼	0	1	7¼	0	1	8	0	1	8¼
17	0	1	6¼	0	1	7½	0	1	8½	0	1	9¼	0	1	9½
18	0	1	7½	0	1	8½	0	1	9½	0	1	10½	0	1	10¾
19	0	1	8½	0	1	9¾	0	1	10¾	0	1	11¾	0	2	0
20	0	1	9½	0	1	10¾	0	2	0	0	2	1	0	2	1¼
30	0	2	8½	0	2	10¼	0	3	0	0	3	1½	0	3	1¾
40	0	3	7¼	0	3	9½	0	4	0	0	4	2	0	4	2½
50	0	4	6	0	4	9	0	5	0	0	5	2½	0	5	3
60	0	5	4¾	0	5	8½	0	6	0	0	6	3	0	6	3½
70	0	6	3½	0	6	7¾	0	7	0	0	7	3½	0	7	4¼
80	0	7	2½	0	7	7¼	0	8	0	0	8	4	0	8	4¾
90	0	8	1¼	0	8	6½	0	9	0	0	9	4½	0	9	5½
100	0	9	0	0	9	6	0	10	0	0	10	5	0	10	6
200	0	18	0	0	19	0	1	0	0	1	0	10	1	1	0
300	1	7	0	1	8	6	1	10	0	1	11	3	1	11	6
400	1	16	0	1	18	0	2	0	0	2	1	8	2	2	0
500	2	5	0	2	7	6	2	10	0	2	12	1	2	12	6
600	2	14	0	2	17	0	3	0	0	3	2	6	3	3	0
700	3	3	0	3	6	6	3	10	0	3	12	11	3	13	6
800	3	12	0	3	16	0	4	0	0	4	3	4	4	4	0
900	4	1	0	4	5	6	4	10	0	4	13	9	4	14	6
1000	4	10	0	4	15	0	5	0	0	5	4	2	5	5	0
2000	9	0	0	9	10	0	10	0	0	10	8	4	10	10	0
3000	13	10	0	14	5	0	15	0	0	15	12	6	15	15	0
4000	18	0	0	19	0	0	20	0	0	20	16	8	21	0	0
5000	22	10	0	23	15	0	25	0	0	26	0	10	26	5	0
6000	27	0	0	28	10	0	30	0	0	31	5	0	31	10	0
7000	31	10	0	33	5	0	35	0	0	36	9	2	36	15	0
8000	36	0	0	38	0	0	40	0	0	41	13	4	42	0	0

FEET.	11s. per 100.			11s. 6d. per 100.			12s. per 100.			12s. 6d. per 100.			13s. per 100.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	1¼	0	0	1½	0	0	1½	0	0	1½	0	0	1½
2	0	0	2¾	0	0	2¾	0	0	3	0	0	3	0	0	3
3	0	0	4	0	0	4¼	0	0	4¼	0	0	4½	0	0	4¾
4	0	0	5¼	0	0	5½	0	0	5¾	0	0	6	0	0	6¼
5	0	0	6½	0	0	7	0	0	7¼	0	0	7½	0	0	7¾
6	0	0	8	0	0	8¼	0	0	8¾	0	0	9	0	0	9¼
7	0	0	9¼	0	0	9¾	0	0	10	0	0	10½	0	0	11
8	0	0	10½	0	0	11	0	0	11½	0	1	0	0	1	0½
9	0	1	0	0	1	0½	0	1	1	0	1	1½	0	1	2
10	0	1	1¼	0	1	1¾	0	1	2½	0	1	3	0	1	3½
11	0	1	2½	0	1	3¼	0	1	3¾	0	1	4½	0	1	5¼
12	0	1	3¾	0	1	4½	0	1	5¼	0	1	6	0	1	6¾
13	0	1	5¼	0	1	6	0	1	6¾	0	1	7½	0	1	8¼
14	0	1	6½	0	1	7¼	0	1	8¼	0	1	9	0	1	9¾
15	0	1	7¾	0	1	8¾	0	1	9½	0	1	10½	0	1	11½
16	0	1	9	0	1	10	0	1	11	0	2	0	0	2	1
17	0	1	10½	0	1	11½	0	2	0½	0	2	1½	0	2	2½
18	0	1	11¾	0	2	0¾	0	2	2	0	2	3	0	2	4
19	0	2	1	0	2	2¼	0	2	3¼	0	2	4½	0	2	5¾
20	0	2	2½	0	2	3½	0	2	4¾	0	2	6	0	2	7¼
30	0	3	3½	0	3	5½	0	3	7¼	0	3	9	0	3	10½
40	0	4	4¾	0	4	7¼	0	4	9½	0	5	0	0	5	2½
50	0	5	6	0	5	9	0	6	0	0	6	3	0	6	6
60	0	6	7¼	0	6	10¾	0	7	2½	0	7	6	0	7	9½
70	0	7	8½	0	8	0½	0	8	4¾	0	8	9	0	9	1¼
80	0	8	9½	0	9	2½	0	9	7¼	0	10	0	0	10	4¾
90	0	9	10¾	0	10	4¼	0	10	9½	0	11	3	0	11	8½
100	0	11	0	0	11	6	0	12	0	0	12	6	0	13	0
200	1	2	0	1	3	0	1	4	0	1	5	0	1	6	0
300	1	13	0	1	14	6	1	16	0	1	17	6	1	19	0
400	2	4	0	2	6	0	2	8	0	2	10	0	2	12	0
500	2	15	0	2	17	6	3	0	0	3	2	6	3	5	0
600	3	6	0	3	9	0	3	12	0	3	15	0	3	18	0
700	3	17	0	4	0	6	4	4	0	4	7	6	4	11	0
800	4	8	0	4	12	0	4	16	0	5	0	0	5	4	0
900	4	19	0	5	3	6	5	8	0	5	12	6	5	17	0
1000	5	10	0	5	15	0	6	0	0	6	5	0	6	10	0
2000	11	0	0	11	10	0	12	0	0	12	10	0	13	0	0
3000	16	10	0	17	5	0	18	0	0	18	15	0	19	10	0
4000	22	0	0	23	0	0	24	0	0	25	0	0	26	0	0
5000	27	10	0	28	15	0	30	0	0	31	5	0	32	10	0
6000	33	0	0	34	10	0	36	0	0	37	10	0	39	0	0
7000	38	10	0	40	5	0	42	0	0	43	15	0	45	10	0
8000	44	0	0	46	0	0	48	0	0	50	0	0	52	0	0

Feet.	13s. 6d. per 100.			14s. per 100.			14s. 7d. per 100.			15s. per 100.			16s. per 100.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	1½	0	0	1¾	0	0	1¾	0	0	1¾	0	0	2
2	0	0	3¼	0	0	3½	0	0	3½	0	0	3½	0	0	3¾
3	0	0	4¾	0	0	5	0	0	5¼	0	0	5¼	0	0	5¾
4	0	0	6½	0	0	6¾	0	0	7	0	0	7¼	0	0	7¾
5	0	0	8	0	0	8½	0	0	8¾	0	0	9	0	0	9½
6	0	0	9¾	0	0	10	0	0	10½	0	0	10¾	0	0	11½
7	0	0	11¼	0	0	11¾	0	1	0¼	0	1	0½	0	1	1½
8	0	1	1	0	1	1½	0	1	2	0	1	2½	0	1	3¼
9	0	1	2½	0	1	3	0	1	3¾	0	1	4¼	0	1	5¼
10	0	1	4¼	0	1	4¾	0	1	5½	0	1	6	0	1	7¼
11	0	1	5¾	0	1	6½	0	1	7¼	0	1	7¾	0	1	9
12	0	1	7½	0	1	8¼	0	1	9	0	1	9½	0	1	11
13	0	1	9	0	1	9¾	0	1	10¾	0	1	11½	0	2	1
14	0	1	10¾	0	1	11½	0	2	0½	0	2	1¼	0	2	3
15	0	2	0¼	0	2	1¼	0	2	2¼	0	2	3	0	2	4¾
16	0	2	2	0	2	3	0	2	4	0	2	4¾	0	2	6¾
17	0	2	3½	0	2	4½	0	2	5¾	0	2	6½	0	2	8¼
18	0	2	5¼	0	2	6¼	0	2	7½	0	2	8½	0	2	10½
19	0	2	6¾	0	2	8	0	2	9¼	0	2	10¼	0	3	0½
20	0	2	8½	0	2	9½	0	2	11	0	3	0	0	3	2½
30	0	4	0½	0	4	2½	0	4	4½	0	4	6	0	4	9½
40	0	5	4¾	0	5	7¼	0	5	10	0	6	0	0	6	4¾
50	0	6	9	0	7	0	0	7	3½	0	7	6	0	8	0
60	0	8	1¼	0	8	4¾	0	8	9	0	9	0	0	9	7¼
70	0	9	5½	0	9	9½	0	10	2½	0	10	6	0	11	2½
80	0	10	9½	0	11	2½	0	12	8	0	12	0	0	12	9½
90	0	12	1¾	0	12	7¼	0	13	1½	0	13	6	0	14	4¾
100	0	13	6	0	14	0	0	14	7	0	15	0	0	16	0
200	1	7	0	1	8	0	1	9	2	1	10	0	1	12	0
300	2	0	6	2	2	0	2	3	9	2	5	0	2	8	0
400	2	14	0	2	16	0	2	18	4	3	0	0	3	4	0
500	3	7	6	3	10	0	3	12	11	3	15	0	4	0	0
600	4	1	0	4	4	0	4	7	6	4	10	0	4	16	0
700	4	14	6	4	18	0	5	2	1	5	5	0	5	12	0
800	5	8	0	5	12	0	5	16	8	6	0	0	6	8	0
900	6	1	6	6	6	0	6	11	3	6	15	0	7	4	0
1000	6	15	0	7	0	0	7	5	10	7	10	0	8	0	0
2000	13	10	0	14	0	0	14	11	8	15	0	0	16	0	0
3000	20	5	0	21	0	0	21	17	6	22	10	0	24	0	0
4000	27	0	0	28	0	0	29	3	4	30	0	0	32	0	0
5000	33	15	0	35	0	0	36	9	2	37	10	0	40	0	0
6000	40	10	0	42	0	0	43	15	0	45	0	0	48	0	0
7000	47	5	0	49	0	0	51	0	10	52	10	0	56	0	0
8000	54	0	0	56	0	0	58	6	8	60	0	0	64	0	0

Feet.	16s. 8d. per 100.			17s. per 100.			18s. per 100.			19s. per 100.			20s. per 100.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1	0	0	2	0	0	2	0	0	2¼	0	0	2¼	0	0	2½
2	0	0	4	0	0	4	0	0	4½	0	0	4½	0	0	4¾
3	0	0	6	0	0	6	0	0	6¾	0	0	6¾	0	0	7¼
4	0	0	8	0	0	8¼	0	0	8¾	0	0	9	0	0	9½
5	0	0	10	0	0	10¼	0	0	10¾	0	0	11¼	0	1	0
6	0	1	0	0	1	0¾	0	1	1	0	1	1¼	0	1	2½
7	0	1	2	0	1	2¼	0	1	3	0	1	4	0	1	4¾
8	0	1	4	0	1	4¼	0	1	5¼	0	1	6¼	0	1	7¼
9	0	1	6	0	1	6¼	0	1	7½	0	1	8½	0	1	9½
10	0	1	8	0	1	8½	0	1	9½	0	1	10¾	0	2	0
11	0	1	10	0	1	10½	0	1	11¾	0	2	1	0	2	2½
12	0	2	0	0	2	0½	0	2	2	0	2	3¼	0	2	4¼
13	0	2	2	0	2	2½	0	2	4	0	2	5¼	0	2	7¼
14	0	2	4	0	2	4½	0	2	6¼	0	2	8	0	2	9½
15	0	2	6	0	2	6½	0	2	8½	0	2	10¼	0	3	0
16	0	2	8	0	2	8½	0	2	10½	0	3	0¾	0	3	2½
17	0	2	10	0	2	10¾	0	3	0¾	0	3	2¾	0	3	4¾
18	0	3	0	0	3	0¾	0	3	3	0	3	5	0	3	7¼
19	0	3	2	0	3	2¾	0	3	5	0	3	7¼	0	3	9½
20	0	3	4	0	3	4¾	0	3	7¼	0	3	9½	0	4	0
30	0	5	0	0	5	1¼	0	5	4¾	0	5	8½	0	6	0
40	0	6	8	0	6	9½	0	7	2½	0	7	7¼	0	8	0
50	0	8	4	0	8	6	0	9	0	0	9	6	0	10	0
60	0	10	0	0	10	2½	0	10	9½	0	11	4¾	0	12	0
70	0	11	8	0	11	10¾	0	12	7¼	0	13	3½	0	14	0
80	0	13	4	0	13	7¼	0	14	4¾	0	15	2½	0	16	0
90	0	15	0	0	15	3½	0	16	2½	0	17	1¼	0	18	0
100	0	16	8	0	17	0	0	18	0	0	19	0	1	0	0
200	1	13	4	1	14	0	1	16	0	1	18	0	2	0	0
300	2	10	0	2	11	0	2	14	0	2	17	0	3	0	0
400	3	6	8	3	8	0	3	12	0	3	16	0	4	0	0
500	4	3	4	4	5	0	4	10	0	4	15	0	5	0	0
600	5	0	0	5	2	0	5	8	0	5	14	0	6	0	0
700	5	16	8	5	19	0	6	6	0	6	13	0	7	0	0
800	6	13	4	6	16	0	7	4	0	7	12	0	8	0	0
900	7	10	0	7	13	0	8	2	0	8	11	0	9	0	0
1000	8	6	8	8	10	0	9	0	0	9	10	0	10	0	0
2000	16	13	4	17	0	0	18	0	0	19	0	0	20	0	0
3000	25	0	0	25	10	0	27	0	0	28	10	0	30	0	0
4000	33	6	8	34	0	0	36	0	0	38	0	0	40	0	0
5000	41	13	4	42	10	0	45	0	0	47	10	0	50	0	0
6000	50	0	0	51	0	0	54	0	0	57	0	0	60	0	0
7000	58	6	8	59	10	0	63	0	0	66	10	0	70	0	0
8000	66	13	4	68	0	0	72	0	0	76	0	0	80	0	0

APPENDIX.

In order to give the tradesman a knowledge of the theory on which the tables are constructed, the following rules are given; which, if carefully studied, will enable him to calculate his work himself, or construct similar tables if required.

We commence with *duodecimals*, or *cross multiplication*, a knowledge of which it is absolutely necessary for the artificer to possess.

DUODECIMALS, OR CROSS MULTIPLICATION.

Rule 1.—Write the multiplier under the multiplicand, feet under feet, inches under inches, parts under parts, seconds under seconds, &c., and draw a line below.

2. Multiply each denomination or term, in the multiplicand, beginning at the lowest, by the feet in the multiplier, and write each result under its respective term, observing to carry 1 for every 12, from the lower to the next higher denomination.

3. In the same manner multiply by the inches in the multiplier, and set each product one place farther to the right hand; and proceed in the same manner with the parts, seconds, thirds, &c., keeping in mind to set the product of each lower multiplier a place farther to the right.

TABLE.

12 fourths = 1 third.
12 thirds = 1 second.
12 seconds = 1 part.
12 parts = 1 inch.
12 inches = 1 foot.

Note.—Feet multiplied by feet, give feet.
——————— inches, give inches.
——————— parts, give parts.
Inches multiplied by inches, give parts.
——————— parts give seconds.
Parts multiplied by parts, give thirds.

EXAMPLES.

1. Multiply 7 feet 3 inches, by 4 feet 7 inches.

Ft.	In.	
7	3	
4	7	
29	0	
4	2	9
Ans. 33	2	9

Here 7 feet 3 inches is first multiplied by 4 feet, (which gives feet and inches for the product) saying, 4 times 3 is 12, set down 0, and carry 1 for the 12, according to the rule; then 4 times 7 is 28, and the 1 carried is 29, which set down as in the example. Then multiply the same 7 feet 3 inches by the 7 inches, (which gives inches and parts for the product) saying, 7 times 3 is 21, which is 9 over 12, set down 9 a place farther to the right, or 9 parts, and carry 1 to the inches; then 7 times 7 is 49, and the 1 carried is 50, or 50 inches, the twelves in which are 4 times and 2 over, or 4 feet 2 inches, which set down under their respective denominations. Add the two products together, and their sum, or 33 feet, 2 inches, and 9 parts, is the answer.

2. Multiply 9 feet 4 inches 6 parts, by 4 feet 3 inches 9 parts.

Ft.	In.	Pts.		
9	4	6		
4	3	9		
37	6	0		
2	4	1	6	
	7	0	4	6
Ans. 40	5	1	10	6

or 40 feet, 5 inches, 1 part, 10 seconds, and 6 thirds.

To find the superficial content of any board, pavement, plastering, painting, glazing, &c.

Rule.—Multiply the length by the breadth, the product is the superficial content.

EXAMPLES.

1. If a table be 6 feet 3 inches long, and 3 feet 2 inches broad, how many superficial or square feet does it contain?

Ft.	In.	
6	3	
3	2	
18	9	
1	0	6

Ans. 19 9 6

or 19 feet, 9 inches, 6 parts.

Note.—In order to give a correct notion of the above result, it may be remarked, that the 19 feet in this example are readily perceived to be square feet; but it is not so apparent that the 9 inches 6 parts, denote a surface 1 foot broad, and 9 inches 6 parts long, and the whole would denote a surface 1 foot broad and 19 feet $9\frac{1}{2}$ inches long; *see Notes, pages* 6 *and* 7, *also Remarks, pages* 11 *and* 12.

2. What is the superficial content of a court 40 feet 6 inches long, and 36 feet 9 inches broad?

Ft.	In.	
40	6	length.
36	9	breadth.
1458	0	
30	4	6

Ans. 1488 4 6

and dividing the 1488 square feet by 9, the square feet in a square yard, will give the content 165 yards, 3 feet, 4 inches, and 6 parts.

To find the solid content of a stone, log, chest, &c.

Rule.—Multiply the length by the breadth, and the product so found multiplied by the depth or thickness, will give the solid content.

EXAMPLES.

1. What is the solid content of a stone 5 feet 2 inches long, 2 feet 10 inches broad, and 1 foot 11 inches thick?

Ft.	In.	
5	2	length.
2	10	breadth.
10	4	
4	3	8
14	7	8
1	11	thickness.
14	7	8
13	5	0 4
Ans. 28	0	8 4

or 28 feet, 8 parts, and 4 seconds, the solid content.

2. What is the solid content of a square log of mahogany 15 feet 6 inches long, and 2 feet 3 inches the side of the square?

Ft.	In.	
15	6	length.
2	3	side of the square.
31	0	
3	10	6
34	10	6
2	3	side of the square.
69	9	0
8	8	7 6
Ans. 78	5	7 6

or 78 feet, 5 inches, 7 parts, and 6 seconds, the solid content.

Note.—It may be mentioned that the result of example No. 1, would denote a square solid, whose side was 12 inches, and whose length was 28 feet, 8 parts, 4 seconds; and No. 6 would denote a similar solid, whose length was 78 feet, 5 inches, $7\frac{1}{2}$ parts; *see the Note at last Rule.*

FRACTIONS.

Fractions, or broken numbers, generally arise from the division of one number by another, which is either greater than it, or if less, not contained in it an exact number of times. These are divided into two great branches, viz.: *vulgar fractions*, and *decimal fractions*. As a knowledge of vulgar fractions is necessary to a thorough understanding of decimal fractions, and as a mutual light is thrown by the one on the other, we shall take them up in order, commencing with

VULGAR FRACTIONS.

A *fraction* is an expression of a part or of parts of unity, or of something considered as a whole. It is denoted by two numbers placed the one above the other, with a line between them, thus, $\frac{2}{6}$; the under one is called the *denominator*, as it designates into how many equal parts the unit or thing is divided; and the upper one is called the *numerator*, as it denotes the number of these parts in the given fraction. For example, the fraction $\frac{2}{6}$ denotes that the unit or thing is supposed to be divided into 6 parts, and that of these parts 2 are represented by the fraction.

Vulgar fractions are of various kinds.

A *proper fraction* has its numerator less than its denominator, as $\frac{2}{4}$, or $\frac{5}{6}$.

An *improper fraction*, has its numerator equal to, or greater than its denominator, as $\frac{5}{5}$, or $\frac{9}{7}$.

A *simple fraction* has only one numerator and one denominator, and may be either proper or improper, as in the examples given above.

A *compound fraction*, is the fraction of a fraction, or several fractions connected, with the word *of* between them, as $\frac{1}{3}$ of $\frac{2}{4}$, or $\frac{3}{5}$ of $\frac{4}{6}$ of $\frac{5}{7}$.

A *mixed number* is composed of a whole number and a fraction, as $2\frac{1}{2}$, or $5\frac{7}{8}$.

A *complex fraction*, has its numerator or denominator, or both, composed of fractions, or mixed numbers, as, $\frac{\frac{1}{3}}{2\frac{5}{8}}$, or $\frac{1\frac{2}{5}}{3\frac{7}{9}}$.

A whole number or integer, may be expressed like a fraction, by placing 1 below it as a denominator, thus 4 will be denoted by $\frac{4}{1}$, 5 by $\frac{5}{1}$.

When numbers are set down in the fractional form, it denotes that the numerator is to be divided by the denominator; and its value is the quotient resulting from that division, as $\frac{8}{2} = 4$, $\frac{3}{1} = 3$.

The numerator and denominator of a fraction are sometimes called its *terms*.

From the nature and properties of fractions, the following conclusions are drawn.

1. That if the numerator be less than the denominator, the value of the fraction is less than 1. If the numerator be the same as the denominator, the fraction is equal to 1. And if the numerator be greater than the denominator, the fraction is greater than 1.

2. That if the numerator and denominator of any fraction be divided or multiplied by the same number, or in an equal ratio, their value will remain the same.

3. That to multiply any fraction by any number, it is only necessary either to multiply the numerator, or divide the denominator by that number.

4. That to divide any fraction by any number, it is only necessary either to divide the numerator, or multiply the denominator by that number.

A *common measure* of several numbers, is one that will

divide each of them without a remainder; and the greatest number that will so divide them, is called their greatest common measure.

A *common multiple* of several numbers is one that can be divided by each of them without a remainder; and the least number that can be divided by them, is called their least common multiple.

REDUCTION OF VULGAR FRACTIONS.

To reduce vulgar fractions is to prepare them for being used in the operations of addition, subtraction, &c.

CASE I.

To find the greatest common measure of two or more numbers.

Rule.—When there are two numbers only, divide the greater by the less, then divide the less by the remainder, and proceed dividing the last divisor by the last remainder, until nothing is left; the last divisor is the greatest common measure.

When there are more than two numbers, find the greatest common measure of two of them, and with that common measure and another of the numbers repeat the process directed above, and so on with all the numbers given; the last divisor is the greatest common measure of them all.

Note.—If the last divisor is 1, then the numbers have no common measure, and cannot be reduced to lower terms.

EXAMPLES.

1. Required the greatest common measure of 361 and 304.

304)361(1 19)361(19 19)304(16
304 19 19
57)304(5 171 114
285 171 114
19)57(3
57

Ans. 19.

2. Required the greatest common measure of 528, 352, and 240.

352)528(1 176)240(1 176)528(3
352 176 528
176)352(2 64)176(2 176)352(2
352 128 352
48)64(1
48
16)48(3
48

Thus 176 is the greatest common measure of the two first numbers, and 16 is the greatest common measure of the three.

16)528(33 16)352(22 16)240(15
48 32 16
48 32 80
48 32 80

CASE II.

To reduce a fraction to its lowest terms.

Rule.—Divide both terms of the given fraction by their greatest common measure.

EXAMPLE.

Reduce $\frac{252}{882}$ to its lowest terms. We find by the last rule that the greatest common measure of the two numbers is 126, by which divide them thus, 126)252(2 126)882(7
252 882

or $\frac{252}{882} \div 126 = \frac{2}{7}$, its lowest terms.

Note.—Fractions may often be expeditiously abridged, or reduced to their lowest terms by inspection, without having recourse to the rule for finding the greatest common measure.

1. If both terms end with an even number, or a cypher, they can be divided by 2.

2. If they end with a cypher, or a 5, they are at least divisable by 5.

3. If there be one or more cyphers at the right hand of the terms, they may be abridged by cutting off an equal number from each.

4. If the figures which compose the terms when added, contain an exact number of 3's or 9's, they may be abridged by dividing each term by 3 or 9.

5. When the right hand figures are odd, if the terms can be abridged at all, it will only be by dividing by odd numbers.

CASE III.

To reduce improper fractions to whole or mixed numbers.

Rule.—Divide the numerator by the denominator: the quotient is a whole number, and if there is a remainder, annex it to the whole number, with the denominator of the improper fraction under it, as the fractional part of the result.

EXAMPLES.

Reduce $\frac{16}{4}$, $\frac{37}{8}$, and $\frac{133}{11}$ to whole or mixed numbers.

$\frac{16}{4} = 4$ $\frac{37}{8} = 4\frac{5}{8}$ $\frac{133}{11} = 12\frac{1}{11}$

CASE IV.

To reduce mixed numbers to improper fractions.

Rule.—Multiply the whole number by the denominator of the fraction, and to the product add its numerator, for the new numerator, and place under it the former denominator.

Note.—A whole number may be reduced to an improper fraction having a given denominator, by multiplying the whole number by the given denominator, for a numerator, under which place the said denominator.

EXAMPLES.

1. Reduce $4\frac{2}{3}$, $7\frac{6}{9}$, and $10\frac{11}{12}$, to improper fractions.

$4\frac{2}{3} = \frac{14}{3}$ $\quad 7\frac{6}{9} = \frac{69}{9}$ $\quad 10\frac{11}{12} = \frac{131}{12}$

2. Reduce 21 to an improper fraction, whose denominator shall be 8.

$$21 = \frac{21 \times 8}{8} = \frac{168}{8}$$

CASE V.

To reduce a compound fraction to a simple one.

Rule.—Multiply all the numerators together for a new numerator, and all the denominators together for a new denominator.

Note.—When any two terms of the fraction can be divided by the same number, the quotients may be used instead of them, or when there are in the numerators and denominators terms that are common to each, they may be omitted.

EXAMPLES.

1. Reduce $\frac{1}{4}$ of $\frac{3}{5}$ of $\frac{6}{8}$, to a simple fraction.

$$\frac{1}{4} \times \frac{3}{5} = \frac{3}{20} \times \frac{6}{8} = \frac{18}{160}$$

2. Reduce $\frac{4}{5}$ of $\frac{6}{8}$ of $\frac{5}{10}$ of $\frac{3}{4}$, to a simple fraction.

By omitting the 4's and 5's that are common to both terms, and dividing $\frac{6}{8}$ by 2, we have $\frac{3}{4}$ to multiply by the remaining figures of the terms, or, $\frac{3}{4} \times \frac{3}{10} = \frac{9}{40}$.

CASE VI.

To reduce fractions having different denominators to equivalent ones, having a common denominator.

Rule.—Multiply each numerator into all the denominators except its own, for new numerators; and multiply all the denominators together for a common denominator.

EXAMPLE.

Reduce $\frac{7}{8}$, $\frac{8}{9}$, $\frac{9}{10}$, and $\frac{10}{11}$ to equivalent fractions having common denominators.

$7 \times 9 \times 10 \times 11 = 6930$
$8 \times 8 \times 10 \times 11 = 7040$
$9 \times 8 \times 9 \times 11 = 7128$
$10 \times 8 \times 9 \times 10 = 7200$
} New numerators $= \frac{6930}{7920} = \frac{3465}{3960} = \frac{7}{8}$; $\frac{7040}{7920} = \frac{3520}{3960} = \frac{8}{9}$; $\frac{7128}{7920} = \frac{3564}{3960} = \frac{9}{10}$; $\frac{7200}{7920} = \frac{3600}{3960} = \frac{10}{11}$

$8 \times 9 \times 10 \times 11 = 7920$ Common denominator.

CASE VII.

To find the value of any fraction of a given quantity or sum.

Rule.—Multiply the given quantity or sum by the numerator of the fraction, and divide the product by the denominator. If the quantity or sum is compound, proceed by compound multiplication and division; should there be any remainder after the first division, reduce it to the next lower denomination, and divide by the denominator as formerly, and so on as far as necessary; each quotient so arising shall be of the same name respectively, as the denomination to which the sum or quantity was reduced.

EXAMPLES.

1. Required the value of $\frac{3}{16}$ of £1.

3
20 the shillings in a pound.
—
16)60(3 shillings.
48
—
12
12 the pence in a shilling.
—
16)144(9 pence.
144
—
or $\frac{3}{16}$ of £1=3*s.* 9*d.*, the answer.

2. Required the value of $\frac{8}{89}$ of a cwt.

8
112 the lbs. in a cwt.
—
89)896(10
89
—
6
16 the ounces in a lb.
—
89)96(1
89
—
7
— or $\frac{8}{89}$ of a cwt. = 10lbs., $1\frac{7}{89}$ oz., the answer.

CASE VIII.

To reduce a fraction from one denomination to another.

Rule.—If to reduce from a higher to a lower, multiply the numerator by the number of the lower denomination required to make 1 of the higher; if from a lower to a higher, multiply the denominator by that number.

EXAMPLES.

1. Reduce $\frac{3}{8}$ of £1 to the fraction of 1 penny.

$\frac{3}{8} \times \frac{20}{1} \times \frac{12}{1} = \frac{720}{8} = \frac{90}{1}$ of a penny, the answer.

2. Reduce $\frac{5}{6}$ of a penny to the fraction of £1.

$\frac{5}{6} \times \frac{1}{12} \times \frac{1}{20} = \frac{5}{1440} = \frac{1}{288}$ of £1, the answer.

ADDITION OF VULGAR FRACTIONS.

Rule.—Having by the foregoing rules brought the fractions, when requisite, to others of the same denomination, and having a common denominator; add all the numerators together, and under their sum place the common denominator; the result is the sum of the fractions; and if it be an improper fraction, reduce it to a whole or mixed number.

Note.—When mixed numbers are given, they may either be reduced to improper fractions, or the sum of the fractions may be found, and afterwards added to the sum of the integers.

EXAMPLES.

1. Find the sum of $\frac{2}{5}$, $\frac{7}{8}$, and $\frac{8}{9}$.

$2 \times 8 \times 9 = 144$
$7 \times 5 \times 9 = 315$ } New numerators, $\frac{2}{5} = \frac{144}{360}$, $\frac{7}{8} = \frac{315}{360}$
$8 \times 5 \times 8 = 320$ $\frac{8}{9} = \frac{320}{360}$

$5 \times 8 \times 9 = 360$ Common denominator,—

$\frac{779}{360} = 2\frac{59}{360}$, the answer.

2. Find the sum of $6\frac{1}{2}$, $72\frac{4}{9}$, and $8\frac{3}{18}$.

$6\frac{1}{2} = 6\frac{9}{18}$
$72\frac{4}{9} = 72\frac{8}{18}$
$8\frac{3}{18} = 8\frac{3}{18}$

$86\frac{20}{18} = 87\frac{2}{18} = 87\frac{1}{9}$, the answer.

SUBTRACTION OF VULGAR FRACTIONS.

Rule.—Having prepared the fractions as directed in the

Rule for Addition, subtract the lesser from the greater, and place the remainder, or difference, over the common denominator for the answer.

EXAMPLES.

1. What is the difference between $\frac{5}{7}$ and $\frac{9}{15}$?

$$\frac{5}{7} = \frac{75}{105}$$
$$\frac{9}{15} = \frac{63}{105}$$
$$\frac{12}{105} = \frac{4}{35} \quad Ans.$$

2. What is the difference between $10\frac{7}{8}$ and $19\frac{1}{4}$?

$$19\frac{1}{4} = 19\frac{2}{8}$$
$$10\frac{7}{8} = 10\frac{7}{8}$$
$$8\frac{3}{8} \quad Ans.$$

Note.—In this example, as the fraction $\frac{2}{8}$ is less than $\frac{7}{8}$, we borrow 1 or $\frac{8}{8}$, from the 19, and add it to the fraction $\frac{2}{8}$, or $19\frac{2}{8} = 18\frac{10}{8}$, from which subtracting $10\frac{7}{8}$, there remains a difference of $8\frac{3}{8}$.

MULTIPLICATION OF VULGAR FRACTIONS.

Rule.—Having reduced mixed numbers, if there be any, to improper fractions; multiply all the numerators together for a numerator, and all the denominators together for a denominator, which gives the product required. If the result is an improper fraction, reduce it to a whole or mixed number.

Note 1.—*To multiply a fraction by a whole number;* multiply the numerator of the fraction by the whole number, and place the product above the denominator; or should the denominator contain the multiplier an exact number of times, the result may be obtained by dividing it by the multiplier.

2. *To multiply a mixed number by an integer;* multiply

the numerator of the fraction by the integer as above, and if the product be less than the denominator, set it down over it; but if greater, reduce it to a whole or mixed number, put down the fraction if any, and carry the whole number to the product of the integers.

EXAMPLES.

1. Multiply $\frac{4}{5}$ by $\frac{5}{7}$.

$$\frac{4}{5}\times\frac{5}{7}=\frac{20}{35}=\frac{4}{7}. \quad \textit{Ans.}$$

2. Multiply $\frac{9}{15}$ by 8.

$$\frac{9}{15}\times 8=\frac{72}{15}=4\frac{12}{15}=4\frac{4}{5}. \quad \textit{Ans.}$$

3. Multiply $7\frac{3}{4}$ by 5.

$$7\frac{3}{4}\times 5=35\frac{15}{4}=38\frac{3}{4}. \quad \textit{Ans.}$$

DIVISION OF VULGAR FRACTIONS.

Rule.—The fractions being prepared as directed in the rule for multiplication, invert the divisor, that is, reverse the positions of its numerator and denominator, and proceed as in multiplication.

Note 1.—*To divide a whole number by a fraction;* multiply the dividend by the denominator of the fraction, and divide the product by the numerator.

2. *To divide a fraction by a whole number;* multiply the denominator by the whole number, and place the product under the numerator.

3. *To divide a mixed number by a whole number;* divide the integer part of the dividend by the whole number, and annex the fractional part of the dividend to the remainder; the mixed number thus formed, reduce to an improper fraction, which divide by the divisor, that is to say, multiply its denominator by the divisor for a new denominator; place over it the numerator of the improper fraction, and annex it to the integer part of the quotient formerly found.

EXAMPLES.

1. Divide $\frac{17}{18}$ by $\frac{5}{9}$.

$$\frac{17}{18}\times\frac{9}{5}=\frac{153}{90}=1\frac{63}{90}=1\frac{7}{10}. \quad \textit{Ans.}$$

2. Divide 481 by $\frac{4}{5}$.

$$\frac{481}{1}\times\frac{5}{4}=\frac{2405}{4}=601\tfrac{1}{4}. \quad \textit{Ans.}$$

3. Divide $\frac{13}{15}$ by 12.

$$\frac{13}{15}\times\frac{1}{12}=\frac{13}{180}. \quad \textit{Ans.}$$

4. Divide $942\frac{1}{11}$ by 7.

$$7)942\tfrac{1}{11}$$

$$134\tfrac{4}{77}. \quad \textit{Ans.}$$

DECIMAL FRACTIONS.

The principle on which our common arithmetical notation is founded is the decimal scale, so called from the Latin word *decem*, (ten), and denotes that the value of every figure is increased in a tenfold proportion for each place it recedes from the right, or units place of a sum or series. The same scale is also applied to fractions, which thence take the name of Decimal Fractions.

In vulgar fractions it was seen that the denominator indicated into how many parts the integer or thing was divided, and the numerator the number of these parts, or the value of the given fraction. The same rule holds in decimal fractions; but as the denominators of decimal fractions are either 10, 100, 1000, &c, it is found convenient to set down the numerator only, and as the same scale is used in the integers and fractions, a point is merely placed between them, denoting that the figures to the left of the point are whole numbers, and those to the right of it a fraction.

The value of the fraction is ascertained from the position it occupies in relation to the decimal point; the first figure to the right denoting so many tenths of unity, the second

place so many hundredth parts, the third so many thousandth parts, and so on. Thus .5 denotes $\frac{5}{10}$, or $\frac{1}{2}$; .75 $\frac{75}{100}$, or $\frac{3}{4}$; .125 $\frac{125}{1000}$, or $\frac{1}{8}$. Should it be required to express $\frac{5}{100}$, decimally, as there are no tenth parts in the numerator, it is necessary to place a cypher between the decimal point and the 5, to occupy the place of tenths, thus, .05, and in like manner, $\frac{5}{1000}$, represented decimally, will require two cyphers to be placed between the point and the 5, as there are neither tenths nor hundredths in the numerator, thus, .005. It will therefore be evident that the denominator of a decimal fraction is 1, with as many cyphers annexed as there are places in the numerator or fractional part.

Cyphers on the right of decimals make no alteration of their value, for .5, or .50, or .500, have all the same value, each being equal to $\frac{5}{10}$, or $\frac{1}{2}$; whilst, as stated above, cyphers on the left diminish their value in a tenfold proportion.

A *mixed number* is made up of a whole number and a fraction, the one being separated from the other by the decimal point, thus, 4.75 is equal $4\frac{75}{100}$, or $\frac{475}{100}$.

REDUCTION OF DECIMALS.

CASE I.

To reduce a vulgar fraction to a decimal fraction.

Rule.—Divide the numerator by the denominator, annexing, or supposing annexed, as many cyphers as may be required. Proceed until there is no remainder, or until the quotient consist of as many places of decimals as may be thought necessary; observing that for every cypher added to the numerator there must be a decimal place in the quotient; the result is the decimal required.

EXAMPLES.

1. Reduce $\frac{7}{8}$ to a decimal.

8)7.000
.875

2, Reduce $\frac{11}{16}$ to a decimal.

16)11.0(.6875
96
140
128
120
112
80
80

3. Reduce $\frac{2}{3}$ to a decimal.

3)2.0
.6666, &c.

4. Reduce $\frac{5}{12}$ to a decimal.

12)5.0
.41666, &c.

5. Reduce $\frac{4}{11}$ to a decimal.

11)4.0
.363636, &c.

6. Reduce $\frac{1}{14}$ to a decimal.

14 { 2)1.0
7) .5
.0714285714285, &c.

Note.—In reducing vulgar fractions to decimal fractions, if they can be exactly expressed, they are called *terminate* decimals; if they may be continued to an unlimited number of places, they are called *interminate* decimals. *Interminate* decimals are divided into two classes, *repeaters* and *circulates*. A repeater is produced by the continual repetition of the same figure; when it repeats immediately after the point, as in example 3, it is called a *pure* repeater; when it does not begin at the point, it is called a *mixed* repeater, as in example 4. A *circulate* is one produced by the continued repetition of two or more figures, and is *pure* when it commences to circulate from the decimal point, as in

example 5; and *mixed* when there is an intermediate figure or figures, as in example 6. The part of the fraction which precedes the *repeater* or *circulate*, is called the *finite* part. To distinguish *interminate* from *finite* decimals, a point is placed over the repeating figure, and points over the first and last figures of the circle. When decimals are carried to four or five places of figures, they are generally considered to be sufficiently accurate for mercantile or mechanical calculations; and the peculiarities of *repeaters* and *circulates*, when carried to five places of figures, may be disregarded.

CASE II.

To reduce decimals to vulgar fractions.

Rule.—Place the given decimal for the numerator, and under it, for the denominator, write 1, with as many cyphers annexed as there are places in the decimal, and reduce the fraction to its lowest terms.

Note 1.—If the decimal be a *pure repeater*, place a 9 under it for a denominator; if a *pure circulate*, write as many 9's under it as there are places in the circle for a denominator.

2. If the decimal be mixed, subtract the finite part from the whole decimal, the remainder is the numerator; and for the denominator place as many 9's as there are repeating figures, or circles, with as many cyphers annexed as there are finite places in the decimal.

EXAMPLES.

1. Reduce 75 to a vulgar fraction.

$\frac{75}{100}=\frac{3}{4}$. *Ans.*

2. Reduce .084 to a vulgar fraction.

$\frac{84}{1000}=\frac{21}{250}$. *Ans.*

3. Reduce $.\dot{6}$ to a vulgar fraction.

$\frac{6}{9}=\frac{2}{3}$. *Ans.*

4. Reduce $.\dot{3}\dot{6}$ to a vulgar fraction.

$\frac{36}{99}=\frac{4}{11}$. *Ans.*

5. Reduce $.41\dot{6}$ to a vulgar fraction.

$$\frac{\begin{array}{r}416\\41\\\hline 375\end{array}}{900}=\frac{5}{12}.\ \textit{Ans.}$$

6. Reduce $.0\dot{7}14285\dot{7}$ to a vulgar fraction.

$$\frac{\begin{array}{r}714285\\0\\\hline 714285\end{array}}{9999990}=\frac{1}{14}\ \textit{Ans.}$$

CASE III.

To reduce lower denominations to decimal fractions, of higher denominations.

Rule 1.—To the lower denomination given, annex or suppose annexed, an indefinite number of cyphers, as decimal places, and divide by the number required of that denominator to make one of the higher.

2. If there be several denominators given, begin at the lowest and reduce it to the decimal of the next higher, as directed above; to this prefix the quantity of that denomination, which reduce to the next higher; and proceed in the same manner until you arrive at the highest denomination sought.

EXAMPLES.

1. Reduce $\frac{3}{4}d.$ to the decimal of a shilling.

farthings in a penny, 4)3.

pence in a shilling, 12) .75

.0625. *Ans.*

2. Reduce 4*s*. 8¼*d*. to the decimal of £1.

4)1.
12)8.25
20)4.6875
.234375. *Ans.*

3. Reduce 1 foot 5 inches to the decimal of a lineal yard.

12)5.
3)1.416
.472. *Ans.*

4. Reduce 14 cwt. 1 qr. 18lb. to the decimal of a ton.

28 { 7)18.
4) 2.5 714285714285
4) 1.642857142857
20)14.410714285714
.720535714285. *Ans.*

CASE IV.

To find the value of a decimal fraction.

Rule.—Multiply the decimal by the number required of the next lower denomination, to make 1 of the denomination given; point off as decimals from the right of the product, as many figures as there are places in the given decimal, the figures to the left of the point, are integers of the denomination to which the decimal has been reduced. In the same manner reduce the decimal so pointed off to the next lower denomination, pointing off from the product the same number of places as before, and so on to the lowest denomination. The figures to the left of the points express the number of units of each denomination, or the value of the fraction.

Note.—When the given decimal is a repeater, carry by 9 in the product of the right hand figure; and when it is a

circulate, add the carriage from the left hand figure of the circle to the product of the right hand figure. When the multiplier consists of two or more places of figures, the repeater or circle of the second and subsequent products, must be continued as far to the right as the product of the first multiplier, and in adding the first column, for every 9 carry 1 to the second column.

EXAMPLES.

1. Find the value of .990625 of £1

.990625
20 shillings in a pound.

19.812500
12 pence in a shilling.

9.750000
4 farthings in a penny.

3.000000. *Ans.* 19*s.* 9$\frac{3}{4}$*d.*

2. Find the value of .583 of a lineal yard.

.583
3

1.750
12

9.000. *Ans.* 1 foot 9 inches.

3. Find the value of .4196428571 of a cwt.

.4196428571
4

1.6785714285
28

5428571428 5
13571428571 4

19.0000000000. *Ans.* 1 qr. 19 lb.

ADDITION OF DECIMALS.

Rule.—Write down the numbers to be added, so that the decimal points may stand directly under each other. Add them as in simple addition, and place the decimal point of the sum directly under the decimal point of the numbers.

Note.—In adding *repeaters*, extend them one place beyond the greatest finite portion, and carry by 9 in the right hand column; and in adding *circulates*, extend them beyond the greatest finite portion until the circles end at the same place, and add the carriage from the left of the circle to the sum of the right hand column.

EXAMPLES.

1. Add 34.62, 7.529, .83, .00815, and 876.

34.62
7.529
.83
.00815
876.

918.98715. *Ans.*

2. Add $3.142\dot{4}$, $29.69\dot{5}$, $.\dot{3}$, $4.\dot{6}$, and $.0\dot{7}$.

$3.142\dot{4}$
$29.695\dot{5}$
$.333\dot{3}$
$4.666\dot{6}$
$.077\dot{7}$

$37.915\dot{7}$. *Ans.*

3. Add $17.16435\dot{3}$, $6.0\dot{7}$, $295.2\dot{9}1$, $.47\dot{3}9$, $1463.56\dot{2}5$.

17.164353533533	or,	17.164353
6.070707070707	—	6.070707
295.291291291291	—	295.291291
.473939393939	—	.473939
1463.562556255625	—	1463.562556
1782.562847364916		1782.562847

Note.—In the last method the circles of the other decimals are extended to the right, as far as the finite portion and first circle of the uppermost decimal, which for all ordinary purposes is sufficiently exact.

SUBTRACTION OF DECIMALS.

Rule.—Place the lesser number under the greater, with the points under each other as in addition. Subtract as in whole numbers, and place the decimal point in the remainder, exactly under the others.

Note.—Proceed with repeaters and circulates as directed in the rule for addition, and when the undermost decimal consists of more places of figures than the uppermost, annex or suppose annexed to the latter as many cyphers as will supply the deficiency.

EXAMPLES.

1. From 12.128
   take 7.625585
   4.502415. *Ans.*

2. From 842.
   take .28575
   841.71425 *Ans.*

3. From $176.58\dot{3}$, take $87.\dot{6}$.
   $176.58\dot{3}$
   $87.0\dot{6}6$
   88.916. *Ans.*

4. From $7.645\dot{2}3$, take $3.\dot{9}5\dot{9}$.
   $7.645\dot{2}3$
   $3.95\dot{9}59$
   3.68563. *Ans.*

MULTIPLICATION OF DECIMALS.

Rule.—Multiply the factors together as in simple multiplication, and point of from the product as many decimal places, as there are decimal places in both factors; if there be not so many places of figures in the product, as there are decimal places in the factors, prefix cyphers to make up the deficiency, to the left of which place the decimal point.

Note 1.—To multiply repeaters and circulates, see Note at Reduction of Decimals, Case IV.

2. To multiply by 10, it is only necessary to remove the decimal point one place to the right, to multiply by 100, two places, and so on.

EXAMPLES.

1. Multiply .78 by .24.

.78
.24
312
156
.1872. *Ans.*

2. Multiply .81 by 7.3.

.81
7.3
243
567
5.913. *Ans.*

3. Multiply .623 by .049.

.623
.049
5607
2492
.030527. *Ans.*

4. Multiply 4.93̇ by .16.

4.93̇
.16
2960
4933
.7893̇. *Ans.*

DIVISION OF DECIMALS.

Rule.—Divide as in whole numbers, and point off as many places in the quotient as the number of decimal places in the dividend exceed those of the divisor.

Note.—1. When there are not so many places in the quotient as the rule requires, prefix cyphers to supply the deficiency.

2. When there is a remainder, or when the dividend will not contain the divisor, the quotient may be carried to any degree of exactness required, by annexing cyphers to the dividend, or the repeating figures when the dividend is a repeater.

3. When the decimal places in the divisor and dividend are equal, the quotient is an integer; if there are not so many decimal places in the dividend as in the divisor, annex cyphers to make them equal before proceeding to divide.

4. To divide by 10 reverse Note 2 in the rule for multiplication, by removing the decimal point one place to the left; to divide by 100, two places, &c.

EXAMPLES.

1. Divide 21.7536 by 13.2.

13.2)21.7536(1.648. *Ans.*
13.2
855
792
633
528
1056
1056

2. Divide 21753.6 by .132.

.132)21753 600(164800. *Ans.*

132

855
792

633
528

1056
1056

3. Divide 383·75 by 16·25.

16.25)383.75(23.61538, &c.

3250

5875
4875

10000
9750

2500
1625

8750
8125

6250
4875

13750
13000

750

4. Divide 74·8316̇ by 27·45.

27·45)74·8316(2·726108, &c.

5490

19931
19215

7166
5490

16766
16470

2966
2745

22166
21960

206

INVOLUTION.

When any number is multiplied by itself once, or any assigned number of times, the process is called *Involution*, or the involving a number to any proposed power. The given number is called the root or first power, which being multiplied by itself gives the second power or square; the second power multiplied by the first, gives the third power or cube, and so on.

The power is denoted by a number called the *index* or *exponent*, written at the upper right hand corner of the

given number, thus 3^2 denotes the second power or square of 3, 3^3 the third power or cube of 3, &c.

Any given power of a number may be found by multiplying it by itself as often as there are units in its index or exponent, less one. Thus, the second power or square of 5 is $5\times5=25$; the third power or cube of 5 is $5\times5\times5=125$; the fourth power of 5 is $5\times5\times5\times5=625$; &c.

When two or more powers are multiplied together, their product will be that power whose index is the sum of the exponents of the powers so multiplied; or the product of the multiplication of the powers, corresponds with the addition of the indices or exponents of these powers. For illustration take the following powers of 4.

$4^1=4$, $4^2=16$, $4^3=64$, $4^4=256$, $4^5=1024$, $4^6=4096$.

and $4^2\times4^3=4^5=16\times64=1024$,

also $4^3\times4^3=4^6=64\times64=4096$.

EVOLUTION.

Evolution is the operation by which we find a proposed root of any given number, and is the reverse of Involution; or, it is to find a number such as when multiplied into itself a proposed number of times, will produce the number given. Thus 2 is the square root of 4, because $2\times2=4$; and it is the cube root of 8, because $2\times2\times2=8$.

Roots are generally denoted by placing the character $\surd$ before the power, with the index of the root towards the top of it. Thus, the square root of 16 is denoted by $\surd16$, the index 2 of the second or square root being always omitted, the third or cube root of 27 is denoted by $\sqrt[3]{27}$.

Roots are sometimes denoted by a fractional index being placed towards the top of the power; thus the square root of 9 is represented by $9^{\frac{1}{2}}$, the cube root of 27 by $27^{\frac{1}{3}}$, and the fourth root of 81, by $81^{\frac{1}{4}}$, &c.

TO EXTRACT THE SQUARE ROOT.

Rule 1.—Set down the given number like a dividend in long division, and divide it by commas, into periods of two figures, commencing at the units place, or decimal point, and proceeding to the left; and where there are decimals, commencing at the decimal point, and proceeding to the right, noticing if there is an odd figure in the decimal, to complete the period by adding a cypher, if it is a terminate decimal, or the repeating or circulating figures, if interminate.

2. Find the nearest square root of the first period, which set in the quotient, subtract its square from that period, and annex the next period to the remainder for a new dividend.

3. Double the part of the root found for a portion of a divisor, and find how often it is contained in the new dividend, omitting the units place, and annex the quotient to the part of the root formerly found, and also add it to the new divisor.

4. Multiply this completed divisor by the last figure placed in the root, subtract the product from the dividend, and bring down the next period to the remainder for a new dividend.

5. Proceed in the same manner until all the periods of the given number are exhausted; and if there be a remainder, the operation may be continued as far as desired, by annexing periods of cyphers. Each period of whole numbers will give an integer in the root; and each period of decimals a decimal figure in the root.

Note 1.—In extracting the roots of interminate decimals, periods of the repeating or circulating figures must be used in place of cyphers.

2. The roots of vulgar fractions are found by extracting the root of the numerator for a new numerator, and the root of the denominator for a new denominator; but if this cannot be done without a remainder, reduce the vulgar fraction to a decimal, and extract its root.

3. The best way of doubling the root to form the new divisors is, by adding the last figure placed in the root to the last divisor.

EXAMPLES.

1. Find the square root of 1669264.

```
1'66'92'64(1292 root.
 1
22|66
 2|44
249|2292
 9|2241
2582|5164
    |5164
```

2. Find the square root of 22.155.

```
22.15'50(4.7069 root.
 16
87|615
 7|609
9406|65000
   6|56436
94129|856400
     |847161
```

9239 remainder.

3. Find the square root of $.\dot{4}$.

```
.44(.6666 root
 36
126|844
  6|756
1326|8844
   6|7956
13326|88844
     |79956
```

8888. remainder.

4. Find the square root of $\frac{169}{196}$.

Numerator, 1'69(13 Denominator, 1'96(14

```
 1                    1
23) 69               24) 96
 69                   96
```

Ans. $\frac{13}{14}$.

PRACTICAL APPLICATION OF THE SQUARE ROOT, WITH REMARKS ON SOME OF ITS USES.

1. *To find a mean proportional between two given numbers.* Extract the square root of their product.

2. *To find the side of a square equal to a given area.* Extract the square root of the area, the result is the length of the side.

3. *To find any side of a right angled triangle, having the other two sides given.* The square of the hypothenuse, or longest side of a right angled triangle, is equal to the sum of the squares of the other two sides. Therefore, having the hypothenuse and another side given, the difference of the squares of these, is equal to the square of the remaining side.

4. *To increase or diminish a circle in any given proportion.* Circles are to one another as the squares of their diameters or circumferences; therefore square the given diameter or circumference, enlarge or diminish it in the proportion required, and extract the square root of the result.

5. *To increase or diminish similar plane figures in any given proportion.* Similar plane figures are to one another as the squares to their corresponding sides; therefore square the several sides, enlarge or diminish them in the required proportion, and extract the square root of each result, for corresponding sides of a similar figure.

EXAMPLES.

1. Find a mean proportional between 7 and 175.

$$175\times 7=12'25(35. \quad \textit{Ans.}$$

$$\begin{array}{r|l} & 9 \\ \hline 65 & 3\,25 \\ & 3\,25 \end{array}$$

2. Required the side of a square equal to a parallelogram 180 feet long, and 80 feet broad?

$$180 \times 80 = 1'44'00(120. \quad \textit{Ans.}$$

	1
22	44
	44

3. The base of a right angled triangle is 81 feet, and the perpendicular 108 feet, required the hypothenuse?

$$81^2 = \ 65\ 61$$
$$108^2 = 1\ 16\ 64$$
$$1'82'25(135. \quad \textit{Ans.}$$

	1
23	82
3	69
265	1325
	1325

4. The base of a right angled triangle is 375 feet, and the hypothenuse 625 feet, required the perpendicular?

$$625^2 = 39\ 06\ 25$$
$$375^2 = 14\ 06\ 25$$
$$25'00'00(500. \quad \textit{Ans.}$$
$$25\ 00\ 00$$

5. A maltster has a kiln 16 feet in diameter, which dries 6 bolls at a time, what must be the diameter of a kiln which will dry 10 bolls?

$16^2 = 256$, then

$$6 : 10 :: 256 : 4'26.66(20.6559. \quad \textit{Ans.}$$

	4
406	2666
6	2436
4125	23066
5	20625
41305	244166
5	206525
413109	3764166
	3717981
	46185

6. Required the dimensions of a parallelogram similar

to one which is 99 feet long, and $53\frac{3}{4}$ feet broad, but which shall contain only half the area.

$99^2 = 9801 \div 2 = 49'00.50$ (70.0035 length.

49

140003 | 0000 500000
3 | 420009

1400065 | 7999100
7000325

998775

$53\frac{3}{4}^2 = 53.75^2 = 2889.0625 \div 2 = 14'44.53'12'50$ (38.0069. brd.

9

68 | 5 44
8 | 5 44

76006 | 531250
6 | 456036

760129 | 7521400
6841161

680239

TO EXTRACT THE CUBE ROOT.

Rule 1.—Point off the given number into periods of three places each, beginning at the units place in integers, and pointing off to the left, and in decimals proceeding from the decimal point to the right; complete periods of finite decimals, if need be, by annexing cyphers, and the repeating or circulating figures, if the decimal be interminate.

2. Find the greatest cube number in the first period on the left, set its cube root in the quotient as the first figure of the required root; subtract its cube from the period, and to the remainder, if any, annex the next period for a dividend.

3. Find a trial divisor by multiplying the square of the part of the root found by 300, divide the dividend by it, and put the quotient for the second figure of the root.

4. Multiply the part of the root formerly found by the last figure placed in the root, and this product by 30, which result place under the trial divisor; and beneath that write the square of the figure last placed in the root.

5. Multiply the sum of these three numbers by the figure last placed in the root, subtract the product from the dividend, and to the remainder annex the next period for a new dividend, with which proceed in the same manner until the given number is exhausted. If there be any remainder, periods of cyphers, repeaters, or circulates, as the case requires, may be annexed, and the root carried out as far as necessary.

EXAMPLES.

1. Required the cube root of 87528384?

87'528'384(444. *Ans.*

$4^3 = 64$

$4^2 \times 300 = 4800$
$4 \times 4 \times 30 = 480$
$4^2 = 16$
$5296 \times 4 = 21184$

$44^2 \times 300 = 580800$
$44 \times 4 \times 30 = 5280$
$4^2 = 16$
$586096 \times 4 = 2344384$

23528
2344384

2. Required the cube root of 784.673416880?

784.673'416'880(9.2235. *Ans.*

$9^3 = 729$

$9^2 \times 300 = 24300$
$9 \times 2 \times 30 = 540$
$2^2 = 4$
$24844 \times 2 = 49688$

$92^2 \times 300 = 2539200$
$92 \times 2 \times 30 = 5520$
$2^2 = 4$
$2544724 \times 2 = 5089448$

$922^2 \times 300 = 255025200$
$922 \times 3 \times 30 = 82980$
$3^2 = 9$
$255108189 \times 3 = 765324567$

$9223^2 \times 300 = 25519118700$
$9223 \times 5 \times 30 = 1383450$
$5^2 = 25$
$25520502175 \times 5 = 127602510875$

55673
5985416
895968880
130644313000
3041802125

PRACTICAL APPLICATION OF THE CUBE ROOT, WITH REMARKS ON SOME OF ITS USES.

1. *To find two mean proportionals between two given extremes.* Multiply each extreme by the square of the other, and extract the cube root of the products; or having in this manner found one of the means, the other may be found by proportion.

2. *To find the side of a cube equal in content to any given solid.* Extract the cube root of the solid content.

3. Similar solids are to one another as the cubes of their similar sides; and the solid content and weight of spheres, are to one another, as the cubes of their diameters.

4. *To find the dimensions or weight of a solid, having those of a similar one given.* Cube the dimensions or weight, enlarge or diminish them in the proportion required, and extract the cube root of the result.

EXAMPLES.

1. Find two mean proportionals between 12 and 96.

$96^2 = 9216 \times 12 = 110'592$ (48 the greater.
64
$4^2 \times 300 = 4800$ 46592
$4 \times 8 \times 30 = 960$
$8^2 = 64$
$5824 \times 8 = 46592$

$12^2 = 144 \times 96 = 13'824$ (24 the lesser.
8
$2^2 \times 300 = 1200$ 5824
$2 \times 4 \times 30 = 240$
$4^2 = 16$
$1456 \times 4 = 5824$

or, having found the greater, then,

48 : 96 :: 12
12
48)1152(24 the lesser.
96
192
192

2. If a bullet of 10 inches diameter weigh $62\frac{1}{2}$ lbs., what will a bullet weigh whose diameter is 6 inches?

$$10^3 : 6^3 :: 62\tfrac{1}{2}$$
$$\text{or, } 1000 : 216 :: 62.5$$
$$216$$
$$\overline{3750}$$
$$625$$
$$1250$$
$$1{,}000)13{,}500.0$$
$$13.5, \text{ or } 13\tfrac{1}{2} \text{ lbs. the answer.}$$

3. Required the diameter of a bullet whose weight is $13\frac{1}{2}$ lbs., when one of the same kind, whose diameter is 10 inches, weighs $62\frac{1}{2}$ lbs.?

$$62\tfrac{1}{2} : 13\tfrac{1}{2} :: 10^3$$
$$\text{or, } 62.5 : 13.5 :: 1000$$
$$13.5$$
$$62.5)13500.0(216 \text{ and } \sqrt[3]{216} = 6 \text{ inches, the answer.}$$
$$1250$$
$$\overline{1000}$$
$$625$$
$$\overline{3750}$$
$$3750$$

4. A granary is 18 feet long, 12 feet broad, and 6 feet deep, required the dimensions of a similar one, which will contain twice as much?

$18^3 = 5832 \times 2 = 11664$ and $\sqrt[3]{11664} = 22.678$ the length.
$12^3 = 1728 \times 2 = 3456$ and $\sqrt[3]{3456} = 15.119$ the breadth.
$6^3 = 216 \times 2 = 432$ and $\sqrt[3]{432} = 7.559$ the depth.

TABLE XIII.

A TABLE OF SQUARES AND CUBES, SQUARE ROOTS AND CUBE ROOTS, AND ALSO RECIPROCALS OF NUMBERS, FROM 1 TO 100.

This table exhibits at a glance the *square* and *cube*, the *square root* and *cube root*, and also the *reciprocal* of each number from 1 to 100; and will save the labour of squaring,

cubing, or extracting the square or cube roots of numbers within its limits. It may be remarked, that whilst the numbers in the second and third columns are the squares and cubes of the numbers in the first, the numbers in the first are the square roots and cube roots of the numbers in the second and third columns. The first column is also the square of the fourth and the cube of the fifth column. The *reciprocal* of a number is the quotient of 1 divided by that number; it is useful on many occasions, particularly when in place of dividing one number by another, it is found more convenient to multiply that number by the reciprocal of the divisor, which produces the same result.

This table may be extended or modified in various ways; for example, from the number 21 we get the following results, which might be carried further if required.

No.	Square.	Cube.	Reciprocal.
.21	.0441	.009261	4.7619048
2.1	4.41	9.261	.47619048
21	441	9261	.047619048
210	44100	9261000	.0047619048

From the above it will be seen that when the decimal point is removed one place either to the right or left in the numbers of the first column, the point must be removed two places in the numbers of the second column, and three places in the numbers of the third column in the same direction, whilst in the reciprocal the decimal point is removed one place in the opposite direction.

No.	Square.	Cube.	Sq. Root.	Cube Root.	Reciprocal.
1	1	1	1.000000	1.000000	1.000000000
2	4	8	1.414214	1.259921	.500000000
3	9	27	1.732051	1.442250	.333333333
4	16	64	2.000000	1.587401	.250000000
5	25	125	2.236068	1.709976	.200000000
6	36	216	2.449490	1.817121	.166666667

No.	Square.	Cube.	Sq. Root.	Cube Root.	Reciprocal.
7	49	343	2.645751	1.912931	.142857143
8	64	512	2.828427	2.000000	.125000000
9	81	729	3.000000	2.080084	.111111111
10	100	1000	3.162278	2.154435	.100000000
11	121	1331	3.316625	2.223980	.090909091
12	144	1728	3.464102	2.289429	.083333333
13	169	2197	3.605551	2.351335	.076923077
14	196	2744	3.741657	2.410142	.071428571
15	225	3375	3.872983	2.466212	.066666667
16	256	4096	4.000000	2.519842	.062500000
17	289	4913	4.123106	2.571282	.058823529
18	324	5832	4.242641	2.620741	.055555556
19	361	6859	4.358899	2.668402	.052631579
20	400	8000	4.472136	2.714418	.050000000
21	441	9261	4.582576	2.758924	.047619048
22	484	10648	4.690416	2.802039	.045454545
23	529	12167	4.795832	2.843867	.043478261
24	576	13824	4.898979	2.884499	.041666667
25	625	15625	5.000000	2.924018	.040000000
26	676	17576	5.099020	2.962496	.038461538
27	729	19683	5.196152	3.000000	.037037037
28	784	21952	5.291503	3.036589	.035714286
29	841	24389	5.385165	3.072317	.034482759
30	900	27000	5.477226	3.107232	.033333333
31	961	29791	5.567764	3.141381	.032258065
32	1024	32768	5.656854	3.174802	.031250000
33	1089	35937	5.744563	3.207534	.030303030
34	1156	39304	5.830952	3.239612	.029411765
35	1225	42875	5.916080	3.271066	.028571429
36	1296	46656	6.000000	3.301927	.027777778
37	1369	50653	6.082763	3.332222	.027027027
38	1444	54872	6.164414	3.361975	.026315789
39	1521	59319	6.244998	3.391211	.025641026
40	1600	64000	6.324555	3.419952	.025000000
41	1681	68921	6.403124	3.448217	.024390244
42	1764	74088	6.480741	3.476027	.023809524
43	1849	79507	6.557439	3.503398	.023255814
44	1936	85184	6.633250	3.530348	.022727273
45	2025	91125	6.708204	3.556893	.022222222
46	2116	97336	6.782330	3.583048	.021739130
47	2209	103823	6.855655	3.608826	.021276600
48	2304	110592	6.928203	3.634241	.020833333
49	2401	117649	7.000000	3.659306	.020408163
50	2500	125000	7.071068	3.684031	.020000000
51	2601	132651	7.141428	3.708430	.019607843
52	2704	140608	7.211103	3.732511	.019230769
53	2809	148877	7.280110	3.756286	.018867925

No.	Square.	Cube.	Sq. Root.	Cube Root.	Reciprocal.
54	2916	157464	7.348469	3.779763	.018518519
55	3025	166375	7.416198	3.802953	.018181818
56	3136	175616	7.483315	3.825862	.017857143
57	3249	185193	7.549834	3.848501	.017543860
58	3364	195112	7.615773	3.870877	.017241379
59	3481	205379	7.681146	3.892996	.016949153
60	3600	216000	7.745967	3.914868	.016666667
61	3721	226981	7.810250	3.936497	.016393443
62	3844	238328	7.874008	3.957892	.016129032
63	3969	250047	7.937254	3.979057	.015873016
64	4096	262144	8.000000	4.000000	.015625000
65	4225	274625	8.062258	4.020726	.015384615
66	4356	287496	8.124038	4.041240	.015151515
67	4489	300763	8.185353	4.061548	.014925373
68	4624	314432	8.246211	4.081655	.014705882
69	4761	328509	8.306624	4.101566	.014492754
70	4900	343000	8.366600	4.121285	.014285714
71	5041	357911	8.426150	4.140818	.014084507
72	5184	373248	8.485281	4.160168	.013888889
73	5329	389017	8.544004	4.179339	.013698630
74	5476	405224	8.602325	4.198336	.013513514
75	5625	421875	8.660254	4.217163	.013333333
76	5776	438976	8.717798	4.235824	.013157895
77	5929	456533	8.774964	4.254321	.012987013
78	6084	474552	8.831761	4.272659	.012820513
79	6241	493039	8.888194	4.290840	.012658228
80	6400	512000	8.944272	4.308870	.012500000
81	6561	531441	9.000000	4.326749	.012345679
82	6724	551368	9.055385	4.344481	.012195122
83	6889	571787	9.110434	4.362071	.012048193
84	7056	592704	9.165151	4.379519	.011904762
85	7225	614125	9.219544	4.396830	.011764706
86	7396	636056	9.273618	4.414005	.011627907
87	7569	658503	9.327379	4.431048	.011494253
88	7744	681472	9.380832	4.447960	.011363636
89	7921	704969	9.433981	4.464745	.011235955
90	8100	729000	9.486833	4.481405	.011111111
91	8281	753571	9.539392	4.497941	.010989011
92	8464	778688	9.591663	4.514357	.010869565
93	8649	804357	9.643651	4.530655	.010752688
94	8836	830584	9.695360	4.546836	.010638298
95	9025	857375	9.746794	4.562903	.010526316
96	9216	884736	9.797959	4.578857	.010416667
97	9409	912673	9.848858	4.594701	.010309278
98	9604	941192	9.899495	4.610436	.010204082
99	9801	970299	9.949874	4.626065	.010101010
100	10000	1000000	10.000000	4.641589	.010000000

MENSURATION.

By mensuration is generally understood the method of ascertaining correctly the amount of surface or area of any body; also its bulk or solidity, in whatever form or state it may be found. The amount of surface or area is estimated by the number of square inches, feet, yards, &c., which are contained in any given figure; and the bulk or solidity, by the number of cubic or solid inches, feet, yards, &c., which may be in any given body. Mensuration is thus naturally divided into two branches, superficial and solid.

I.—MENSURATION OF SUPERFICIES.

DEFINITIONS.

1. A *surface* or *superficies* is an extension or a figure of two dimensions, length and breadth; but without thickness.

2. Plane figures that are bounded by right lines have names according to the number of their sides, or of their angles; for they have as many sides as angles; the least number being three.

3. A figure of three sides and angles is called a *triangle;* and it receives particular denominations from the relations of its sides and angles.

4. An *equilateral* triangle is that whose three sides are equal.

5. An *isosceles* triangle is that which has two sides equal.

6. A *right-angled* triangle is that which has one right angle.

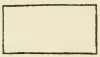
7. An *obtuse-angled* triangle has one obtuse angle.

8. An *acute-angled* triangle has all its three angles acute.

9. A figure of four sides and angles is called a *quadrangle*, or a *quadrilateral*.

10. A *parallelogram* is a quadrilateral which has both its pairs of opposite sides parallel; and it takes the following particular names, viz., *rectangle, square, rhombus, rhomboid.*

11. A *rectangle* is a parallelogram, having right angles.



12. A *square* is an equilateral rectangle, having its length and breadth equal.

13. A *rhomboid* is an oblique-angled parallelogram.

14. A *rhombus* is an equilateral rhomboid, having all its sides equal, but its angles oblique.

15. A *trapezoid* is a quadrilateral which has only one pair of its opposite sides parallel.

16. A *trapezium* is a quadrilateral, which has none of its sides parallel.

17. A *diagonal* is a line joining any two opposite angles of a quadrilateral.

18. Plane figures that have more than four sides are in general called *polygons*, and they receive other particular names, according to the number of their sides or angles; thus, a *pentagon* is a polygon of five sides, a *hexagon* of six, a *heptagon* of seven, an *octagon* of eight, a *nonagon* of nine, a *decagon* of ten, an *undecagon* of eleven, and a *dodecagon* of twelve sides. An equilateral triangle is also called a *trigon*, and a square a *tetragon*.

19. Any figure is equilateral, when all its sides are equal; and it is equiangular when all its angles are equal. When both these are equal, it is a regular figure.

20. A *circle* is a plane figure bounded by a curve line, called the *circumference*, which is every where equidistant from a certain point within, called its centre. The circumference itself is often called a circle, and it is also called the *periphery*.

21. The *radius* of a circle is a line drawn from the centre to the circumference.

22. The *diameter* of a circle is a line drawn through the centre, and terminating at the circumference on both sides.

23. An *arc* of a circle is any part of the circumference.

24. A *chord* is a right line joining the extremities of an arc.

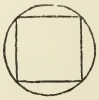
25. A *segment* is any part of a circle bounded by an arc and its chord.

26. A *semicircle* is half the circle, or a segment cut off by a diameter. The half circumference is sometimes called the semicircle.

27. A *sector* is any part of a circle which is bounded by an arc and two radii drawn to its extremities.

28. A *quadrant*, or quarter of a circle, is a sector having a quarter of the circumference for its arc, and its two radii are perpendicular to each other. A quarter of the circumference is sometimes called a quadrant.

29. A right-lined figure is *inscribed* in a circle, or the circle *circumscribes* it, when all the angular points of the figure are in the circumference of the circle.



30. A right-lined figure *circumscribes* a circle, or the circle is *inscribed* in it, when all the sides of the figure touch the circumference of the circle.

31. The *height* or *altitude* of a figure is a perpendicular drawn from an angle, or the vertex of the figure to the opposite side, called the *base*.

32. The *perimeter* of a figure, is the sum of all its sides taken together.

33. An *ellipse* is a figure formed by a plane cutting a cone in an oblique direction, passing through its two slant sides. If from any point in the curve two straight lines be drawn to two points within it, called the *foci*, the sum of these lines will always be the same. A straight line drawn through the *foci*, and terminated both ways by the curve of the ellipse, is called the *transverse diameter*, or *axis major;* its length is always equal to the sum of the two lines drawn from any point in the curve of the ellipse to the two foci. A straight line bisecting the transverse diameter at right angles, and terminated both ways by the curve of the ellipse, is called the *conjugate diameter*, or *axis minor*. The point where the two lines intersect each other, is called the centre of the ellipse. If with half the transverse diameter as radius, one point of the compasses be placed on one of the extremities of the conjugate diameter, and with the other point arcs be made, cutting the transverse diameter on each side of the conjugate diameter, the points in which the arcs cut the transverse diameter, are the foci of the ellipse. A straight line drawn through any of the foci perpendicular to the transverse diameter, and terminated both ways by the curve, is called the *parameter* of the ellipse, and is a third proportional to the transverse and conjugate diameters. A straight line drawn from any point in the curve perpendicular to either of the diameters, is called an *ordinate*. That part of the diameter which is contained between the vertex and the ordinate, is called an *abscissa*.

PROBLEM I.

To find the area of a right-angled parallelogram.

Rule.—Multiply the length by the breadth, the product will be the area.

EXAMPLES.

1. Required the area of the square A B C D, the side of which is 5 feet 9 inches?

Ft.	In.					
5	9	side of square,		or,	5.75	
5	9				5.75	
28	9				2875	
4	3	9			4025	
33	0	9	*Ans.*		2875	
					33.0625	
					12	
					.7500	
					12	
					9.0000	

2. Required the area of the rectangle ABCD, whose length A B is 12 feet, and breadth AC, 7 feet 6 inches?

12	0 length.	or,	7.5 breadth.	
7	6 breadth.		12 length.	
84	0		90.0	
6	0			
feet 90	0 area.			

PROBLEM II.

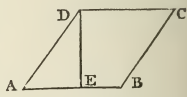
To find the area of any parallelogram; whether a square, a rectangle, a rhombus, or a rhomboid.

Rule.—Multiply the one side by a perpendicular let fall

upon it from the opposite side, that is, by the altitude, the product will be the area.

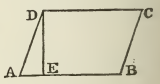
EXAMPLES.

1. Required the area of the rhombus A B C D, whose side A B is 9 feet 6 inches, and perpendicular height D E, 8 feet 6 inches?



Ft.	In.			
9	6		or,	9.5
8	6			8.5
76	0			475
4	9			760
feet 80	9			80.75
or 80 feet 9 inches the area.				12
				9.00

2. Required the area of the rhomboid ABCD, whose length is 14 feet 3 inches; and altitude D E, 8 feet 9 inches?



14	3		or,	14.25
8	9			8.75
114	0			7125
10	8	3		9975
124	8	3		11400
or 124 ft., 8 in., 3 parts, the area.				124.6875
				12
				8.2500
				12
				3.0000

PROBLEM III.

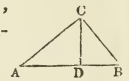
To find the area of a triangle, when the base and altitude are given.

Rule.—Multiply the base by the perpendicular height, and half the product will be the area. Or, multiply half

the base by the height, or half the height by the base, the product will be the area.

EXAMPLE.

Required the area of the triangle A B C, whose base A B is 12 feet 9 inches, and altitude C D, is 6 feet 9 inches?



(1st.)

	12	9			
	6	9			
	76	6			
	9	6	9		
2)	86	0	9		
	43	0	4	6	

(2d.)

6	4	6		
6	9	0		
38	3	0		
4	9	4	6	
43	0	4	6	

(3d.)

12	9			
3	4	6		
38	3	0		
4	3	0		
0	6	4	6	
43	0	4	6	

or 43 feet, 4 parts, and 6 seconds, the area.

(4th.)

	12.75
	6.75
	6375
	8925
	7650
2)	86.0625
	43.03125
	12
	.37500
	12
	4.50000
	12
	6.00000

PROBLEM IV.

To find the area of a triangle when the three sides only are given.

Rule.—From half the sum of the three sides, subtract each side severally; and multiply the half sum and the three remainders continually together; the square root of the product will be the area.

Note.—If all the sides of a triangle are equal, multiply the square of a side by .433, the product will be the area.

EXAMPLES.

1. Required the area of the triangle A B C, whose sides A B, B C, and C A, are 35, 29, and 24 feet, respectively?

35 44 44 44 $44\times9\times15\times20=11'88'00$(341.76
29 35 29 24 9
24 9 15 20 64|288
2)88 4|276
44 681|1200
1| 681
6827|51900
7|47789
68346|411100
410076
1024

or 341 feet, 9 inches nearly, the area.

2. Required the area of an equilateral triangle, whose sides are each 20 feet.

$$20^2=400\times.433=173.2$$

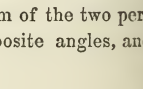
PROBLEM V.

To find the area of a trapezium.

Rule.—Multiply the diagonal by the sum of the two perpendiculars falling upon it from the opposite angles, and half the product will be the area.

EXAMPLE.

Required the area of the trapezium A B C D, the diagonal of which D B, is 44 feet, the perpendicular C F, 15 feet, and A E, 19 feet?



$15+19=34$, sum of the perpendiculars;
then $34\times44=1496$,
and $\frac{1496}{2}=748$ feet, the area.

PROBLEM VI

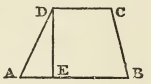
To find the area of a trapezoid.

Rule.—Multiply the sum of the parallel sides by the per-

pendicular distance between them, and half the product will be the area.

EXAMPLE.

Required the area of the trapezoid A B C D, whose sides A B and C D are 68 and 36 feet, and the perpendicular D E 45 feet?



68+36=104=sum of the sides;

then, $104 \times 45 = 4680$, and $\frac{4680}{2} = 2340$ feet, the area.

PROBLEM VII.

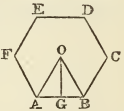
To find the area of a regular polygon.

Rule.—Multiply half the perimeter of the figure by the perpendicular let fall from the centre on one of its sides, and the product will be the area.

Note.—The perpendicular is the same as the radius of the inscribed circle.

EXAMPLE.

Required the area of the regular hexagon A B C D E F, whose sides A B, B C, &c., are each 14.6 feet, and the perpendicular O G, is 12.64 feet?



$\frac{14.6 \times 6}{2} = 43.8$ = half the perimeter; and $43.8 \times 12.64 =$ 553.632 square feet, the area required.

PROBLEM VIII.

To find the area of a regular polygon, when the side only is given.

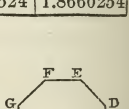
Rule.—Multiply the square of the side of the polygon by the number standing opposite its name in the column under *area* in the following table, and the product will be the area of the polygon.

Note.—The side of any given regular polygon, multiplied by the number opposite to it, in the column under *perpendicular* in the table, will give the perpendicular of that polygon.

No. of sides.	Name of Polygon.	Angle at centre.	Angle ABO of Polygon.	Area, the side of Polygon being 1.	Perpendicular, the side of Polygon being 1.
3	Trigon,	120°	30°	0.4330127	0.2886751
4	Tetragon,	90°	45°	1.0000000	0.5000000
5	Pentagon,	72°	54°	1.7204774	0.6881909
6	Hexagon,	60°	60°	2.5980762	0.8660254
7	Heptagon,	$51\frac{3}{7}$°	$64\frac{2}{7}$°	3.6339124	1.0382607
8	Octagon,	45°	$67\frac{1}{2}$°	4.8284271	1.2071068
9	Nonagon,	40°	70°	6.1818242	1.3737387
10	Decagon,	36°	72°	7.6942088	1.5388417
11	Undecagon,	$32\frac{8}{11}$°	$73\frac{7}{11}$°	9.3656399	1.7028436
12	Dodecagon,	30°	75°	11.1961524	1.8660254

EXAMPLE.

Required the area of a regular octagon A B C D E F G H, whose side A B, is 16; also required the length of the perpendicular O I?



16^2=256=square of side, 4.8284271=area when the side is 1.

256
289705626
241421355
96568542
1236.0773376=area of octagon.

and, 1.2071068
16
72426408
12071068
19.3137088=perpen. of octagon.

PROBLEM IX.

The diameter of a circle being given; to find the circumference.

Rule 1.—As 7 is to 22, or, as 113 is to 355, so is the diameter to the circumference.

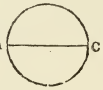
2. Multiply the diameter by $3\frac{1}{7}$, or by 3.1416, and the product will be the circumference.

Note 1.—The proportion of 113 to 355 is nearer the truth than 7 to 22.

Note 2.—The number 3.14159, &c., is the circumference of a circle whose diameter is 1, and when great exactness is required, the following or any desired portion of it may be used instead of 3.1416, viz. 3.1415926535897 93.

EXAMPLE.

If the diameter A C of a circle is 9 feet, what is the circumference?



By Rule 1. 7 : 22 :: 9

9

7)198

$28\frac{2}{7}$ feet, the circumference.

or, 113 : 355 :: 9

9

113)3195(28.2743$\frac{9}{113}$ ft. the circum.

226

935

904

310

226

840

791

494

452

420

339

91

By Rule 2. 9

$3\frac{1}{7}$

27

$1\frac{2}{7}$

$28\frac{2}{7}$ ft. the circum.

or, 3.1416

9

28.2744 ft. the circum.

PROBLEM X.

The circumference of a circle being given; to find the diameter.

Rule 1.—As 22 is to 7; or, as 355 is to 113, so is the circumference to the diameter.

2. Divide the circumference by $3\frac{1}{7}$; or, by 3.1416, and the quotient will be the diameter. Or, multiply the circumference by .318309886, the product is the diameter.

EXAMPLE.

Required the diameter of a circle whose circumference is 12?

By Rule 1st. 22 : 7 :: 12 or, as 355 : 113 :: 12

```
      12                          12
22)84(3.818 4/22          355)1356(3.8197 65/355
      66                        1065
      180                       2910
      176                       2840
       40                        700
       22                        355
      180                       3450
      176                       3195
        4                       2550
                                2485
                                  65
```

By Rule 2d. $3\frac{1}{7}$)12 or, 3.1416)12.0000(3.8197 3048/31416

```
 7  7                          94248
22)84(3.818 4/22             257520
      66                      251328
      180                      61920
      176                      31416
       40                     305040
       22                     282744
      180                     222960
      176                     219912
        4                      3048
```

or, .318309886
12
3.819718632

Note.—Unless great exactness is required, it will be sufficient to multiply the circumference by .3183.

PROBLEM XI.

To find the area of a circle.

Rule 1.—Multiply half the circumference by half the diameter, and the product will be the area; or multiply the whole circumference by the whole diameter, and $\frac{1}{4}$ of the product will be the area.

2. Multiply the square of the diameter by the decimal .7854, and the product will be the area; or, multiply the square of the circumference by the decimal .07958, and the product will be the area.

EXAMPLES.

1. Required the area of a circle whose diameter is 42, and circumference 131.947?

$$\frac{131.947}{2} = 65.9735 \text{ half the circumference.}$$

$$\frac{42}{2} = 21 \text{ half the diameter.}$$

659735
1319470
1385.4435 = area required.

2. Required the area of a circle whose diameter is 10 feet 6 inches?

10.5
10.5
525
105
110.25 square of diameter.
.7854
44100
55125
88200
77175
86.590350
12
7.084200

or 86 feet, 7 inches, the area.

Useful Problems relating to the circle, and its equal and inscribed square.

1. Diameter, $\times .8862269$
2. Circumference, $\times .2820948$ } = side of an equal square.

3. Diameter, $\times .7071067$
4. Circumference, $\times .2250791$ } = side of the inscribed square.
5. Area, $\times .6366197$
6. Side of square, $\times 1.1283792$ = Diam. of an equal circle.
7. Do. $\times 3.5449076$ = Circum. of an equal circle.
8. Do. $\times 1.4142360$ = Diameter of its circumscribing circle.
9. Do. $\times 4.4428829$ = Circumference of its circumscribing circle.

TABLE XIV.

A TABLE OF CIRCUMFERENCES, AND AREAS OF CIRCLES, AND OF SIDES OF EQUAL SQUARES, CORRESPONDING TO DIAMETERS FROM 1 TO 120.

As the necessity for ascertaining the circumferences and areas of circles, or the side of a square equal to a circle of a given diameter, is of frequent occurrence, the utility of this table will be at once apparent. Each diameter may be made to produce many results, if treated similarly to the following example with diameter 16, which shows the circumference, area, and side of equal square of .16, 1.6, 16, 160, and might be carried farther.

Diam.	Circumference.	Area.	Side of equal square.
.16	.50265482	.0201061929	.14179631
1.6	5.0265482	2.01061929	1.4179631
16	50.265482	201.061929	14.179631
160	502.65482	20106.1929	141.79631

It will be seen from the above that when the decimal point is removed one place to the right, the diameter is increased tenfold, or multiplied by 10 ; and in order that the other columns may correspond therewith, the decimal point must be removed *one* place, in the columns under *circumference*, and *side of equal square*, and *two* places in the column under *area* in the same direction. To diminish a diameter tenfold, or to divide it by 10, the decimal point is removed one place to the left ; and to bring the other

columns to correspond, the decimal points in them must also be removed to the left in the manner directed above.

If any given diameter extend beyond the bounds of the table, but at the same time is divisable by a number that will bring the quotient within its limits, take out the circumference, area, and side of equal square, answering to this quotient or diameter, and multiply the first and third by the divisor, and the second by the square of the divisor, which will give the circumference, area, and side of equal square, corresponding to the given diameter. For example, if the diameter of a circle be 264, what is the corresponding circumference, area, and side of equal square?

Now 264 divided by 4 gives 66 as a quotient, and corresponding to diameter 66 in the table we have,

Circumference.	Area.	Side of equal square.
207.345115	3421.194399	58.490977
4	16	4
829.380460	20527166394	233.963908
	3421194399	
	54739.110384	

the circumference, area, and side of equal square, corresponding to a diameter of 264, as required.

By removing the decimal point one place to the left in the above circumference and side of equal square, and two places in the area, we get the following result for a diameter of 26.4:

Circumference.	Area.	Side of equal square.
82.9380460	547.39110384	23.3963908

and by a similar process, we could find corresponding results for diameters 2.64, .264, &c.

If the diameter be feet, the circumference, area, and side of equal square, will be feet also; and if the diameter be inches, the other columns will also be inches.

Diameter.	Circumference.	Area.	Side of equal square.
1	3.141592	0.785398	0.886227
2	6.283185	3.141592	1.772454
3	9.424777	7.068583	2.658681
4	12.566370	12.566370	3.544908

Diameter.	Circumference.	Area.	Side of equal square.
5	15.707963	19.634954	4.431135
6	18.849555	28.274333	5.317362
7	21.991148	38.484560	6.203588
8	25.132741	50.265482	7.089815
9	28.274333	63.617251	7.976042
10	31.415926	78.539816	8.862269
11	34.557519	95.033177	9.748496
12	37.699111	113.097335	10.634723
13	40.840704	132.732289	11.520950
14	43.982297	153.938040	12.407177
15	47.123889	176.714586	13.293404
16	50.265482	201.061929	14.179631
17	53.407075	226.980069	15.065858
18	56.548667	254.469004	15.952085
19	59.690260	283.528736	16.838312
20	62.831853	314.159265	17.724539
21	65.973445	346.360590	18.610765
22	69.115038	380.132711	19.496992
23	72.256631	415.475628	20.383219
24	75.398223	452.389342	21.269446
25	78.539816	490.873852	22.155673
26	81.681408	530.929158	23.041900
27	84.823001	572.555261	23.928127
28	87.964594	615.752160	24.814354
29	91.106186	660.519855	25.700581
30	94.247779	706.858347	26.586808
31	97.389372	754.767635	27.473035
32	100.530964	804.247719	28.359262
33	103.672557	855.298599	29.245489
34	106.814150	907.920276	30.131715
35	109.955742	962.112750	31.017942
36	113.097335	1017.876019	31.904169
37	116.238928	1075.210085	32.790396
38	119.380520	1134.114947	33.676623
39	122.522113	1194.590606	34.562850
40	125.663706	1256.637061	35.449077
41	128.805298	1320.254312	36.335304
42	131.946891	1385.442360	37.221531
43	135.083484	1452.201204	38.107758
44	138.230076	1520.530844	38.993985
45	141.371669	1590.431280	39.880212
46	144.513262	1661.902513	40.766439
47	147.654854	1734.944542	41.652665
48	150.796447	1809.557368	42.538892
49	153.938040	1885.740990	43.425119
50	157.079632	1963.495408	44.311346

Diameter.	Circumference.	Area.	Side of equal square.
51	160.221225	2042.820022	45.197573
52	163.362817	2123.716633	46.083800
53	166.504410	2206.183440	46.970027
54	169.646003	2290.221044	47.856254
55	172.787595	2375.829444	48.742481
56	175.929188	2463.008640	49.628708
57	179.070781	2551.758632	50.514935
58	182.212373	2642.079421	51.401162
59	185.353966	2733.971006	52.287389
60	188.495559	2827.433388	53.173616
61	191.637151	2922.466566	54.059842
62	194.778744	3019.070540	54.946069
63	197.920337	3117.245310	55.832296
64	201.061929	3216.990877	56.718523
65	204.203522	3318.307240	57.604750
66	207.345115	3421.194399	58.490977
67	210.486707	3525.652355	59.377204
68	213.628300	3631.681107	60.263431
69	216.769893	3739.280655	61.149658
70	219.911485	3848.451000	62.035885
71	223.053078	3959.192141	62.922112
72	226.194671	4071.504079	63.808339
73	229.336263	4185.386812	64.694566
74	232.477856	4300.840342	65.580792
75	235.619449	4417.864669	66.467019
76	238.761041	4536.459791	67.353246
77	241.902634	4656.625710	68.239473
78	245.044226	4778.362426	69.125700
79	248.185819	4901.669937	70.011927
80	251.327412	5026.548245	70.898154
81	254.469004	5152.997350	71.784381
82	257.610597	5281.017250	72.670608
83	260.752190	5410.607947	73.556835
84	263.893782	5541.769440	74.443062
85	267.035375	5674.501730	75.329289
86	270.176968	5808.804816	76.215516
87	273.318560	5944.678698	77.101743
88	276.460153	6082.123377	77.987969
89	279.601746	6221.138852	78.874196
90	282.743338	6361.725123	79.760423
91	285.884931	6503.882191	80.646650
92	289.026524	6647.610054	81.532877
93	292.168116	6792.908715	82.419104
94	295.309709	6939.778171	83.305331
95	298.451302	7088.218424	84.191558
96	301.592894	7238.229473	85.077785

Diameter.	Circumference.	Area.	Side of equal square.
97	304.734487	7389.811319	85.964012
98	307.876080	7542.963961	86.850239
99	311.017673	7697.687399	87.736466
100	314.159265	7853.981634	88.622693
101	317.300858	8011.846665	89.508919
102	320.442451	8171.282492	90.395146
103	323.584043	8332.289115	91.281373
104	326.725636	8494.866535	92.167600
105	329.867229	8659.014751	93.053827
106	333.008821	8824.733764	93.940054
107	336.150414	8992.023573	94.826281
108	339.292007	9160.884178	95.712508
109	342.433599	9331.315579	96.598735
110	345.575192	9503.317777	97.484962
111	348.716785	9676.890771	98.371189
112	351.858377	9852.034562	99.257416
113	354.999970	10028.749148	100.143643
114	358.141563	10207.034532	101.029870
115	361.283155	10386.890711	101.916096
116	364.424748	10568.317687	102.802323
117	367.566340	10751.315459	103.688550
118	370.707933	10935.884027	104.574777
119	373.849526	11122.023392	105.461004
120	376.991118	11309.733553	106.347231
$\frac{1}{8}$	.392699	.012272	.110778
$\frac{1}{4}$	.785398	.049087	.221557
$\frac{3}{8}$	1.178097	.110447	.332335
$\frac{1}{2}$	1.570796	.196350	.443113
$\frac{5}{8}$	1.963495	.306796	.553892
$\frac{3}{4}$	2.356194	.441786	.664670
$\frac{7}{8}$	2.748894	.601420	.775449

TABLE XV.

A TABLE OF DIAMETERS AND AREAS OF CIRCLES, AND OF SIDES OF EQUAL SQUARES, CORRESPONDING TO CIRCUMFERENCES FROM 1 TO 120.

The observations introductory to Table XIV., and the following method of extending the range of this Table, are equally applicable to both; substituting, of course, circumference for diameter, according as Table XIV. or XV. is the one under consideration.

The diameter and side of an equal square, corresponding to any required circumference, may be found by adding together the diameters and the sides of equal squares opposite as many

of the circumferences in the Table, as amount to the circumference sought. Suppose the diameter and side of an equal square, corresponding to a circumference of 225, were required :—then 112 and 113=225 ; and, as these numbers stand conveniently together for adding, we take them in preference to others which could be found to make up the sum ; and thus we get, for a circumference of 225, a diameter of 71.619724, and the side of an equal square of 63.471328.

To find the area corresponding to any circumference made up in this manner—multiply the sum of the collected diameters by one-fourth of the corresponding circumference, or the circumference by one-fourth of the diameters, and the product is the corresponding area. To find the area corresponding to circumference 225—diameter, as above,

$71.619724 \times \frac{225}{4} = 56.25 = 4028.609475 =$ the area.

The area of any circumference in the Table multiplied by 4, is equal to the area of twice that circumference ; and any area divided by 4, is equal to the area of half its corresponding circumference. The fractions at the end of the Tables, from $\frac{1}{8}$ to $\frac{7}{8}$, may be used to make up any fractional number required, in the same manner as the whole numbers.

Circumference.	Diameter.	Area.	Side of equal square.
1	.318310	.079577	.282095
2	.636620	.318310	.564190
3	.954930	.716197	.846284
4	1.273240	1.273240	1.128380
5	1.591549	1.989437	1.410474
6	1.909859	2.864789	1.692569
7	2.228169	3.899296	1.974664
8	2.546479	5.092958	2.256758
9	2.864789	6.445775	2.538853
10	3.183099	7.957747	2.820948
11	3.501409	9.628874	3.103043
12	3.819719	11.459156	3.385138
13	4.138029	13.448593	3.667232
14	4.456338	15.597184	3.949327
15	4.774648	17.904931	4.231422
16	5.092958	20.371833	4.513517
17	5.411268	22.997889	4.795611
18	5.729578	25.783101	5.077706
19	6.047888	28.727467	5.359801
20	6.366198	31.830989	5.641896
21	6.684508	35.093665	5.923991
22	7.002817	38.515496	6.206085

Circumference.	Diameter.	Area.	Side of equal square.
23	7.321127	42.096482	6.488180
24	7.639437	45.836624	6.770275
25	7.957747	49.735920	7.052370
26	8.276057	53.794371	7.334465
27	8.594367	58.011977	7.616559
28	8.912677	62.388738	7.898654
29	9.230987	66.924654	8.180749
30	9.549297	71.619724	8.462844
31	9.867606	76.473950	8.744939
32	10.185916	81.487331	9.027033
33	10.504226	86.659867	9.309128
34	10.822536	91.991557	9.591223
35	11.140846	97.482403	9.873318
36	11.459156	103.132403	10.155413
37	11.777466	108.941559	10.437507
38	12.095776	114.909869	10.719602
39	12.414086	121.037334	11.001697
40	12.732395	127.323954	11.283792
41	13.050705	133.769730	11.565886
42	13.369015	140.374660	11.847981
43	13.687325	147.138745	12.130076
44	14.005635	154.061985	12.412171
45	14.323945	161.144380	12.694266
46	14.642255	168.385930	12.976360
47	14.960565	175.786635	13.258455
48	15.278875	183.346494	13.540550
49	15.597184	191.065509	13.822645
50	15.915494	198.943679	14.104740
51	16.233804	206.981003	14.386834
52	16.552114	215.177483	14.668929
53	16.870424	223.533118	14.951024
54	17.188734	232.047907	15.233119
55	17.507044	240.721851	15.515214
56	17.825354	249.554951	15.797308
57	18.143664	258.547205	16.079403
58	18.461973	267.698614	16.361498
59	18.780283	277.009178	16.643593
60	19.098593	286.478898	16.925688
61	19.416903	296.107772	17.207782
62	19.735213	305.895801	17.489877
63	20.053523	315.842985	17.771972
64	20.371833	325.949323	18.054067
65	20.690143	336.214817	18.336161
66	21.008452	346.639466	18.618256
67	21.326762	357.223270	18.900351
68	21.645072	367.966228	19.182446

Circumference.	Diameter.	Area.	Side of equal square.
69	21.963382	378.868342	19.464541
70	22.281692	389.929611	19.746635
71	22.600002	401.150034	20.028730
72	22.918312	412.529612	20.310825
73	23.236622	424.068346	20.592920
74	23.554932	435.766234	20.875015
75	23.873241	447.623277	21.157109
76	24.191551	459.639476	21.439204
77	24.509861	471.814829	21.721299
78	24.828171	484.149337	22.003394
79	25.146481	496.643000	22.285489
80	25.464791	509.295818	22.567583
81	25.783101	522.107791	22.849678
82	26.101411	535.078919	23.131773
83	26.419721	548.209201	23.413868
84	26.738030	561.498639	23.695963
85	27.056340	574.947232	23.978057
86	27.374650	588.554980	24.260152
87	27.692960	602.321882	24.542247
88	28.011270	616.247940	24.824342
89	28.329580	630.333152	25.106436
90	28.647890	644.577520	25.388531
91	28.966200	658.981042	25.670626
92	29.284510	673.543719	25.952721
93	29.602819	688.265551	26.234816
94	29.921129	703.146539	26.516910
95	30.239439	718.186681	26.799005
96	30.557749	733.385978	27.081100
97	30.876059	748.744430	27.363195
98	31.194369	764.262037	27.645290
99	31.512679	779.938799	27.927384
100	31.830989	795.774715	28.209479
101	32.149299	811.769787	28.491574
102	32.467608	827.924014	28.773669
103	32.785918	844.237396	29.055764
104	33.104228	860.709932	29.337858
105	33.422538	877.341624	29.619953
106	33.740848	894.132470	29.902048
107	34.059158	911.082472	30.184143
108	34.377468	928.191628	30.466238
109	34.695778	945.459939	30.748332
110	35.014087	962.887406	31.030427
111	35.332397	980.474027	31.312522
112	35.650707	998.219803	31.594617
113	35.969017	1016.124734	31.876711
114	36.287327	1034.188820	32.158806

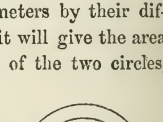
Circumference.	Diameter.	Area.	Side of equal square.
115	36.605637	1052.412061	32.440901
116	36.923947	1070.794457	32.722996
117	37.242257	1089.336008	33.005091
118	37.560567	1108.036714	33.287185
119	37.878876	1126.896575	33.569280
120	38.197186	1145.915590	33.851375
1/8	.039789	.001243	.035262
1/4	.079577	.004974	.070524
3/8	.119366	.011191	.105786
1/2	.159155	.019894	.141047
5/8	.198944	.031085	.176309
3/4	.238732	.044762	.211571
7/8	.278521	.060927	.246833

PROBLEM XII.

To find the area of a circular ring, or space included between two concentric circles.

Rule.—Multiply the sum of the diameters by their difference, and this product by .7854, and it will give the area required; or the difference of the areas of the two circles, will be the area of the ring.

EXAMPLE. — The diameters of the circles A B C D, are 20 and 15, required the area of the circular ring, or space included between their circumferences?



20+15=35 sum of diameters.
20—15= 5 difference of diameters.
175×.7854=137.4450 area of the ring.

or, 20^2=400×.7854=314.1600 area of A B.
15^2=225×.7854=176.7150 area of C D.
137.4450 area of the ring.

PROBLEM XIII.

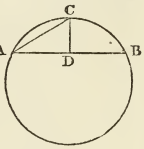
To find the length of any arc of a circle.

Rule 1.—Having the chord and the versed sine of half the arc given. From 8 times the chord of half the arc,

subtract the chord of the whole arc, and $\frac{1}{3}$ of the remainder will be the length of the arc nearly.

2. Having the degrees and the radius of the circle given. Multiply the degrees in the given arc by the radius of the circle, and that product multiplied by the number .017453, will give the length of the arc.

EXAMPLES.



1. Required the length of the arc, A C B, whose chord A B is 48 and versed sine of half the arc C D is 18?

Here A D=24, and $24^2+18^2=576+324=900$;
and $\sqrt{900}=30=$A C, the chord of half the arc.
Whence $\frac{30\times 8-48}{3}=\frac{240-48}{3}=\frac{192}{3}=64$, length of the arc required.

2. Required the length of an arc of 30 degrees, the radius being 9 feet?
$30\times 9\times .017453=270\times .017453=4.71231$ length of the arc.

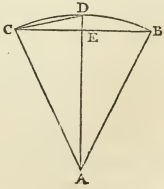
PROBLEM XIV.

To find the area of a sector of a circle.

Rule 1.—Multiply the radius, or half the diameter, by half the length of the arc of the sector, and the product will be the area.

2. As 360 is to the degrees in the arc of the sector, so is the area of the whole circle to the area of the sector.

EXAMPLES.



1. Required the area of the sector ABDC, of which the radius AB is 40, the chord BC of the whole arc 50, and the chord CD of half the arc 27?

Here $\frac{27\times 8-50}{3}=\frac{216-50}{3}=\frac{166}{3}=55.\dot{3}$ length of arc CDB;

And $\frac{55.\dot{3}}{2}\times 40=27.\dot{6}\times 40=1106.\dot{6}$ area of the sector.

2. The radius of the sector of a circle is 20, and the degrees in its arc 22, required the area of the sector?

The diameter $40^2=1600\times .7854=1256.6400$=area of the whole circle.

Then, 360 : 22 :: 1256.64

22

251328

251328

360)27646.68(76.79=area of the sector.

2520

2446

2160

2860

2520

3400

3240

160

PROBLEM XV.

To find the area of a segment of a circle.

Rule 1.—Find the area of a sector having the same arc with the given segment, by one of the last problems. Find also the area of the triangle formed by the chord of the segment, and the radii of the sector. Then, when the given segment is less than a semicircle, the *difference* of the areas of the sector and the triangle, will be the area of the segment; when the segment is greater than a semicircle, the *sum* of the areas of the sector and triangle will be the area required.

2. Divide the height or versed sine of the segment by the diameter; find the quotient in the column of heights in the following table of versed sines; and multiply the number opposite to it, in the column under area, by the square of the diameter, and the product will be the area.

Note.—When the given segment is greater than a semi-

circle, subtract it from 1; and the tabular number corresponding to this remainder, subtracted from .785398, will give the tabular area of the given segment.

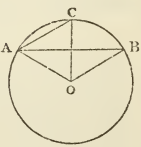
TABLE XVI.

A TABLE OF THE AREAS OF SEGMENTS OF A CIRCLE WHOSE DIAMETER IS 1, AND WHICH IS DIVIDED INTO 100 EQUAL PARTS.

Versed Sine or Height.	Area.	Height.	Area.	Height.	Area.	Height.	Area.
.001	.000042	.12	.053385	.25	.153546	.38	.273861
.005	.000470	.13	.059999	.26	.162263	.39	.283592
.01	.001329	.14	.066833	.27	.171089	.40	.293369
.02	.003748	.15	.073874	.28	.180019	.41	.303187
.03	.006865	.16	.081112	.29	.189047	.42	.313041
.04	.010537	.17	.088535	.30	.198168	.43	.322928
.05	.014681	.18	.096134	.31	.207376	.44	.332843
.06	.019239	.19	.103900	.32	.216666	.45	.342782
.07	.024168	.20	.111823	.33	.226033	.46	.352742
.08	.029435	.21	.119897	.34	.235473	.47	.362717
.09	.035011	.22	.128113	.35	.244980	.48	.372704
.10	.040875	.23	.136465	.36	.254550	.49	.382699
.11	.047005	.24	.144944	.37	.264178	.50	.392699

EXAMPLES.

1. What is the area of the segment ABC, of which the radius O B is 10, the chord A B is 18, and the chord A C 10?



Here $\frac{10\times 8-18}{3}=\frac{80-18}{3}=\frac{62}{3}=20.\dot{6}$=length of arc ACB;

And $\frac{20.\dot{6}}{2}\times 10=10.\dot{3}\times 10=103.\dot{3}$=area of sector OACB;

Also $\frac{18+10+10}{2}=\frac{38}{2}=19$=half sum of sides AB, AC, OB;

Whence 19—18=1=first difference; 19—10=9=second and third differences;

And $\sqrt{19\times1\times9\times9}=\sqrt{1539}=39.23$, area of the triangle AOB;

And 103.3—39.23=64.10=area of the segment required, it being in this case less than a semicircle.

2. What is the area of the circular segment, whose height is 18, and diameter of the circle 50?

$\frac{18}{50}=.36$, opposite which, in the table, under area, is. 25455, and $.25455\times50^2=636.37500$ area of the segment.

PROBLEM XVI.

To find the circumference of an ellipse, the transverse and conjugate diameters being known.

Rule.—Multiply the square root of half the sum of the squares of the two diameters by 3.1416, and the product will be the circumference nearly.

EXAMPLE.

Required the circumference of an ellipse whose transverse diameter AB is 24, and conjugate C D 18?

$\sqrt{\frac{24^2+18^2}{2}}=\sqrt{\frac{576+324}{2}}=\sqrt{\frac{900}{2}}=21.2132$;

and $21.2132\times3.1416=66.64338912$ the circumference.

PROBLEM XVII.

To find the area of an ellipse, the transverse and conjugate diameters being given.

Rule.—Multiply the transverse diameter by the conjugate, and that product by .7854, the result will be the area.

EXAMPLE.

Required the area of an ellipse whose transverse diameter is 24, and conjugate 20?

$24\times20=480\times.7854=376.9920$ the area.

Note.—An ellipse is described as follows; when the transverse and conjugate diameters or axes are given. Draw the transverse axis A B, and the conjugate C D, bisecting each other perpendicularly in the centre E; with the radius A E and centre C, describe an arc cutting A B in F and G, which two points will be the foci of the ellipse.

Take any point H in the transverse axis, and with the radii AH, BH, describe arcs crossing each other in the points I, I, I, I, which points will be in the curve of the ellipse. In the same manner, by assuming other points in the transverse axis as radii, there may be found as many points in the curve as we please, through which a line A C B D is to be drawn with a steady hand, which will be the circumference of the ellipse.

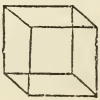
Or, the curve may be drawn thus; having found the foci F and G, take a thread of the length of the transverse axis, and fasten its ends with pins in the foci, then stretch the thread, and it will reach to K in the curve; and by moving a pencil round within the thread, keeping it always stretched, it will trace out the circumference of the ellipse.

II.—MENSURATION OF SOLIDS.

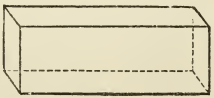
DEFINITIONS.

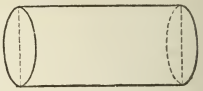
1. A *solid* is a body or figure of three dimensions, namely, length, breadth, depth or thickness.

2. A *cube* is a solid contained by six equal square sides,

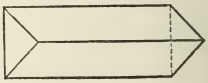


3. A *parallelopipedon* is a solid contained by six quadrilateral planes, every opposite two of which are equal and parallel.





4. A *cylinder* is a solid having two equal circular ends, and every plane section parallel to the ends, a circle equal to them also. It may be conceived to be described by the revolution of a right-angled parallelogram about one of its sides which remains fixed.



5. A *prism* is a solid whose two ends are any plane figures which are parallel, equal, and similar; and its sides connecting those ends are parallelograms. Prisms take their several particular names from the figure of their ends. Thus, when the end is a triangle, it is called a triangular prism; when a square, a square prism or cube; when a pentagon, a pentagonal prism; and so on. A cylinder may be considered as a round prism, or one that has an infinite number of sides.

6 A *pyramid* is a solid having any plane figure for its base, and its sides triangles, whose vertices all meet in a point at the top, called the vertex of the pyramid.

7. A *cone* is a round pyramid having a circle for its base, and tapering uniformly to the vertex.

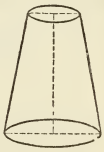
8. A *sphere* or *globe* is a solid bounded by a circular surface, every part of which is equally distant from a point within it called the centre. It may be conceived to be

described by the revolution of a semicircle about a diameter which remains fixed. The *axis* or *diameter* of a sphere is a straight line passing through the centre, and terminating at the surface.

9. A *segment* of a solid is the part cut off from the top by a plane parallel to its base.

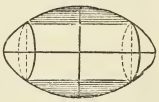
10. A *frustum* is the part left, after the segment has been cut off.

11. The *height of a solid* is a perpendicular drawn from its vertex to the base or plane, on which it is supposed to stand.



12. A *circular spindle* is a solid generated by the revolution of a segment of a circle about its chord.

13. A *spheroid* is a solid generated by the revolution of a semi-ellipse about one of its diameters. The spheroid is called *prolate* when the revolution is made about the transverse diameter, and *oblate* when it is made about the conjugate diameter.



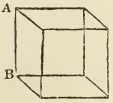
PROBLEM I.

To find the solidity or solid content of a cube, the height of one of its sides being given.

Rule.—Multiply the side of the cube by itself, and that product again by the side, and it will give the solidity required.

EXAMPLE.

What is the solid content of a cube, whose side A B is 17.5 inches?



$17.5 \times 17.5 = 306.25 \times 17.5 = 5359.375$ inches.
Which divided by 1728 = 3.1014 solid feet.

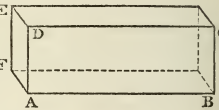
PROBLEM II.

To find the solidity of a parallelopipedon.

Rule.—Multiply the length by the breadth, and that product again by the depth or altitude, and it will give the solidity required.

EXAMPLE.

What is the solidity of a parallelopipedon A B C D E F whose length A B is 10 feet, its breadth E D $5\frac{3}{4}$ feet, and its depth E F $3\frac{1}{2}$ feet?



$10 \times 5.75 = 57.50 \times 3.5 = 201.250$ feet.
Which divided by $27 = 7.4537$ solid yards.

PROBLEM III.

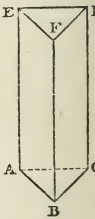
To find the solidity of a prism.

Rule.—Multiply the area of the base or end of the prism, by the perpendicular height or length, and the product will be the solidity.

EXAMPLE.

Required the solidity of an equilateral triangular prism A B C D E F, whose length A E is $3\frac{1}{2}$ inches, and one side of the equilateral end is $1\frac{1}{2}$ inch?

(See Note at Mensuration of Superficies, Problem IV.)

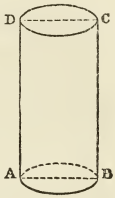


$1.5^2 = 2.25 \times 1.732 = 3.897 \div 4 = .97425$ area of end;
and $.97425 \times 3.5 = 3.409875$ inches, the solid content.

PROBLEM IV.

To find the convex surface of a cylinder.

Rule.—Multiply the periphery or circumference of the base or end of the cylinder, by the height or length, and the product will be the convex surface required.



EXAMPLE.

What is the convex surface of a right cylinder A B C D, the diameter of whose base A B, is 30 inches, and the length A D 60 inches?

$30 \times 3.1416 = 94.2480$ circumference of cylinder;
and $94.2480 \times 60 = 5654.88$ inches, the convex area.

PROBLEM V.

To find the solidity of a cylinder.

Rule.—Multiply the area of the base by the length of the cylinder, and the product will be the solidity.

EXAMPLE.

What is the solidity of a cylinder whose height is 5 feet, and the diameter of the end 2 feet?

$2^2 = 4 \times .7854 = 3.1416$ area of the base;
and $3.1416 \times 5 = 15.7080$ feet, the solid content.

PROBLEM VI.

To find the convex surface of a right cone, or pyramid.

Rule.—Multiply the circumference or perimeter of the base, by the slant height, or the length of the side of the cone or pyramid, and half the product will be the surface required.

EXAMPLE.

Required the convex surface of a right cone A B C, the diameter of whose base A B, is $4\frac{1}{2}$ feet, and the slant height A C, 10 feet;

$4.5 \times 3.1416 = 14.13720$ circumference of base;
and $14.13720 \times 10 = 141.37200 \div 2 = 70.686$ feet, the convex surface required.

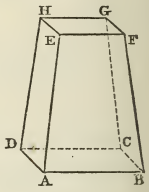
PROBLEM VII.

To find the convex surface of the frustum of a right cone or pyramid.

Rule.—Multiply the sum of the circumferences or perimeters of the two ends, by the slant height of the frustum, and half the product will be the surface required.

EXAMPLE.

Required the surface of the frustum of a square pyramid A B C D E F G H, whose slant height A E, is 9 feet, each side of the base A B C D, 6 feet 8 inches, and each side of the top E F G H, 4 feet 4 inches?



	Ft.	In.		Ft.	In.	
base,	6	8	× 4 =	26	8	perimiter of base.
top,	4	4	× 4 =	17	4	perimiter of top.
				44	0	× 9 = 396 ÷ 2 = 198 feet surface.

PROBLEM VIII.

To find the solidity of a cone or pyramid.

Rule.—Multiply the area of the base by the perpendicular height, and $\frac{1}{3}$ of the product will be the solidity.

EXAMPLES.

1. Required the solidity of a triangular pyramid A B C D, whose perpendicular height, E D, is 9, and each side of the base A B C, 5?

Side of base $5^2 = 25 \times .433 = 10.825$ area of the base;
and $10.825 \times 9 = 97.425 \div 3 = 32.475$ the solidity.

2. Required the solid content of a cone, the diameter of whose base is 18 inches, and its perpendicular height $2\frac{1}{2}$ feet?

$1.5^2 = 2.25 \times .7854 = 1.76715$ area of base;
and $1.76715 \times 2.5 = 4.417875 \div 3 = 1.472625$ solid content.

PROBLEM IX.

To find the solidity of the frustum of a cone or pyramid, the height, and the end diameters, or circumferences, of a cone, or sides of a pyramid, being given.

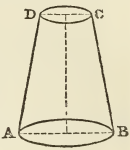
Rule 1.—For all frustums. To the areas of the two ends, add their mean proportional, or the square root of their product; multiply this sum by one-third of the perpendicular height, and the product is the solidity.

2. To find the solidity of the frustum of a cone, the diameters of the two ends, and the height given. To the squares of the diameters of the two ends, add their product; multiply the sum by one-third of the height, and by .7854; the product is the solidity.

3. To find the solidity of the frustum of a cone, the circumferences of the two ends and height being given. To the squares of the circumferences of the two ends, add their product; multiply the sum by one-third of the height, and by .07958; the product is the solidity.

4. To find the solidity of the frustum of a square pyramid, a side of the two ends and height being given. To the squares of a side of the two ends, add their product; multiply the sum by one-third of the height; the product is the solidity.

5. To find the solidity of the frustum of a pyramid of one of the regular polygons, a side of the two ends and the height being given. To the square of a side of the two ends, add the product of these sides; multiply the sum by one-third of the height, and by the number opposite the given polygon, under area, in the table, page 356, the product is the solidity.



EXAMPLES.

1. Required the solidity of the frustum of a cone, A B C D, the diameter of the greater end being 6 feet, the lesser end 3 feet, and the height 9 feet?

By the general rule, $6^2 \times .7854 = 28.2744$, $+3^2 \times .7854 = 7.0686$, $+\sqrt{28.2744 \times 7.0686} = 14.1372 = 49.4802$, $\times 9 \div 3 = 148.4406$, the solidity.

By Rule 2. $6^2+3^2+6\times3=63$, $\times9\div3=189$, $\times.7854=148.4406$, the solidity.

Circumference, greater end, 6 feet; lesser end, 3 feet; height, 9 feet.

By Rule 3. $6^2+3^2+6\times3=63$, $\times9\div3=189$, $\times.07958$, $=15.04062$, the solidity.

Frustum of square pyramid, side of greater end, 6 feet; lesser end, 3 feet; height, 9 feet.

By Rule 4. $6^2+3^2+6\times3=63\times9\div3=189$, the solidity.

Frustum of hexagonal pyramid, side of greater end, 6 feet; lesser end, 3 feet; height, 9 feet.

By Rule 5. $6^2+3^2+6\times3=63\times9\div3=189, \times2.5980762$, $=491.0364018$, the solidity.

PROBLEM X.

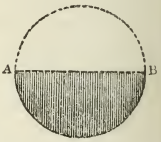
To find the convex surface of a sphere.

Rule.—Multiply the diameter of the sphere by its circumference; or square the diameter, multiply the product by 3.1416, and the result will be the convex superficies required.

Note.—The curve surface of any zone or segment, will also be found by multiplying its height by the whole circumference of the sphere.

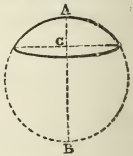
EXAMPLE.

1. Required the convex superficies of a globe whose diameter A B, is 17 inches?



$17^2 - 289 \times 3.1416 = 907.9224$ square inches;
and $907.9224 \div 144 = 6.305$ square feet, the superficies.

2. Required the convex superficies of a segment of a sphere whose diameter A B, is 21 inches, and height of segment A C, $4\frac{1}{2}$ inches?



$21 \times 3.1416 = 65.9736$ circumference of sphere;
and height of segment $4.5 \times 65.9736 = 296.8812$ inches, the superficies.

PROBLEM XI.

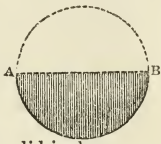
To find the solidity of a sphere.

Rule 1.—Multiply the cube of the diameter by .5236, and the product will be the solidity.

2. Multiply the superficies of the sphere by $\frac{1}{3}$ of the diameter, the product will be the solidity.

Note.—A sphere is $\frac{2}{3}$ of its circumscribing cylinder; and .5236 is $\frac{2}{3}$ of .7854.

EXAMPLES.



1. Required the solidity of a sphere whose diameter A B is 17 inches?

$17^3 \times .5236 = 4913 \times .5236 = 2572.4468$, solid inches;
and $2572.4468 \div 1728 = 1.48868$, solid feet.

2. What is the solidity of a sphere whose diameter is 18 inches?

$18^2 \times 3.1416 = 1017.8784$ the superficies.
and $1017.8784 \times \frac{18}{6} = 3053.6352$ the solidity.

Note.—The side of a square equal to a given sphere, is found by extracting the cube root of its solidity, or by multiplying its diameter by .805996, or where very great accuracy is not required by .806.

TABLE XVII.

A TABLE OF SUPERFICIES, AND SOLIDITIES OF SPHERES, AND SIDES OF EQUAL CUBES, CORRESPONDING TO DIAMETERS FROM 1 TO 100.

This table will be found of great service in presenting, at a glance, results which, by considerable labour, have been prepared specially for this work. The usefulness of the table may be further extended, as in the following example with diameter 13.

Diam.	Superficies.	Solidity.	Side of equal cube.
.13	.0530929158	.001150346510	.10477948
1.3	5.30929158	1.150346510	1.0477948
13	530.929158	1150.346510	10.477948
130	53092.9158	1150346.510	104.77948

It will be observed that the diameter is increased tenfold by removing the decimal point one place to the right, and diminished tenfold by removing it one place to the left; and in order that the other columns may correspond thereto, the decimal point must be removed in the column under

superficies two places, in the column under *solidity* three places, and in the column under *side of equal cube*, one place in the same direction.

If any given diameter extend beyond the limits of the table, but is a multiple of some diameter in the table, that is to say, can be divided by a number which will bring the quotient within its range, take out the *superficies*, *solidity*, and *side of equal cube*, corresponding to the quotient, multiply the side of the equal cube by the divisor, the superficies by the square of the divisor, and the solidity by the cube of the divisor, which will give the superficies, solidity, and side of equal square corresponding to the given diameter. Take for example a diameter of 365, which may be divided by 5, giving a quotient of 73. Then take out the numbers corresponding to a diameter of 73, and multiply them as directed above, thus:

Superficies.	Solidity.	Side of equal cube.
16741.547251	203688.824888	58.837706
25	125	5
83707736255	1018444124440	294.188530
33483094502	407377649776	
418538.681275	203688824888	
	25461103.111000	

being the superficies, solidity, and side of equal cube, corresponding to a diameter of 365.

By shifting the decimal point, as shown with diameter 13, from the above we can get results corresponding to diameters .365, 3.65, 36.5, 3650, &c.

It may be mentioned that the other columns will be of the same denomination as the diameter, whether it be reckoned inches, feet, or yards.

Diam.	Superficies.	Solidity.	Side of equal cube.
1	3.141593	.523599	.805996
2	12.566371	4.188790	1.611992
3	28.274334	14.137167	2.417988
4	50.265482	33.510322	3.223984
5	78.539816	65.449847	4.029980
6	113.097336	113.097336	4.835976
7	153.938040	179.594380	5.641972

Diam.	Superficies.	Solidity.	Side of equal cube.
8	201.061930	268.082573	6.448976
9	254.469005	381.703507	7.253964
10	314.159265	523.598776	8.059960
11	380.132711	696.909970	8.865956
12	452.389342	904.778684	9.671952
13	530.929158	1150.346510	10.477948
14	615.752160	1436.755040	11.283944
15	706.858347	1767.145868	12.089940
16	804.247719	2144.660585	12.895936
17	907.920277	2572.440785	13.701932
18	1017.876020	3053.628059	14.507928
19	1113.114948	3591.364002	15.513924
20	1256.637061	4188.790205	16.119920
21	1385.442360	4849.048261	16.925916
22	1520.530844	5575.279763	17.731911
23	1661.902514	6370.626303	18.537907
24	1809.557368	7238.229474	19.343903
25	1963.495408	8181.230869	20.149899
26	2123.716634	9202.772080	20.955895
27	2290.221044	10305.994700	21.761891
28	2463.008640	11494.040322	22.567887
29	2642.079422	12770.050538	23.373883
30	2827.433388	14137.166941	24.179879
31	3019.070540	15598.531124	24.985875
32	3216.990877	17157.284679	25.791871
33	3421.194400	18816.569199	26.597867
34	3631.681108	20579.526276	27.403863
35	3848.451001	22449.297504	28.209859
36	4071.504079	24429.024474	29.015855
37	4300.840343	26521.848780	29.821851
38	4536.459792	28730.912015	30.627847
39	4778.362426	31059.355770	31.433843
40	5026.548246	33510.321638	32.239839
41	5281.017251	36086.951213	33.045835
42	5541.769441	38792.386087	33.851831
43	5808.804817	41629.767852	34.657827
44	6082.123377	44602.238101	35.463823
45	6361.725124	47712.938427	36.269819
46	6647.610055	50965.010422	37.075815
47	6939.778172	54361.595679	37.881811
48	7238.229474	57905.835791	38.687807
49	7542.963961	61600.872351	39.493803
50	7853.981634	65449.846950	40.299799
51	8171.282492	69455.901182	41.105795
52	8494.866535	73622.176640	41.911791
53	8824.733764	77951.814915	42.717787
54	9160.884178	82447.957601	43.523783

Diam.	Superficies.	Solidity.	Side of equal cube.
55	9503.317777	87113.746290	44.329779
56	9852.034562	91952.322576	45.135775
57	10207.034532	96966.828050	45.941771
58	10568.317687	102160.404305	46.747767
59	10935.884027	107536.192934	47.553763
60	11309.733553	113097.335530	48.359759
61	11689.866264	118846.973684	49.165755
62	12076.282160	124788.248991	49.971751
63	12468.981242	130924.303042	50.777747
64	12867.963509	137258.277431	51.583743
65	13273.228961	143793.313749	52.389739
66	13684.777599	150532.553590	53.195734
67	14102.609422	157479.138546	54.001730
68	14526.724430	164636.210209	54.807726
69	14957.122624	172006.910174	55.613722
70	15393.804003	179594.380031	56.419718
71	15836.768567	187401.761374	57.225714
72	16286.016316	195432.195795	58.031710
73	16741.547251	203688.824888	58.837706
74	17203.361371	212174.790244	59.643702
75	17671.458676	220893.233456	60.449698
76	18145.839167	229847.296118	61.255694
77	18626.502843	239040.119821	62.061690
78	19113.449704	248474.846158	62.867686
79	19606.679751	258154.616723	63.673682
80	20106.192983	268082.573107	64.479678
81	20611.989400	278261.856904	65.285674
82	21124.069003	288695.609705	66.091670
83	21642.431791	299386.973104	66.897666
84	22167.077764	310339.088693	67.703662
85	22698.006922	321555.098065	68.509658
86	23235.219266	333038.142813	69.315654
87	23778.714795	344791.364529	70.121650
88	24328.493509	356817.904806	70.927646
89	24884.555409	369120.905236	71.733642
90	25446.900494	381703.507412	72.539638
91	26015.528764	394568.852928	73.345634
92	26590.440220	407720.083374	74.151630
93	27171.634861	421160.340345	74.957626
94	27759.112687	434892.765433	75.763622
95	28352.873699	448920.500230	76.569618
96	28952.917896	463246.686329	77.375614
97	29559.245278	477874.465323	78.181610
98	30171.855845	492806.978804	78.987606
99	30790.749598	508047.368366	79.793602
100	31415.926536	523598.775560	80.599598

PROBLEM XII.

To find the solidity of the segment of a sphere.

1. When the height and the radius of the base of the segment are given.

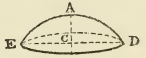
Rule.—To three times the square of the radius of the base of the segment, add the square of the height; multiply the sum by the height, and that product by .5236, the result will be the solidity.

2. When the diameter and the height of the segment, are given.

Rule.—From three times the diameter of the sphere subtract twice the height of the segment; multiply the remainder by the square of the height; and that product by .5236, the result will be the solidity.

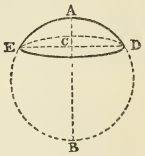
EXAMPLES.

1. What is the content of the spherical segment AECD, whose height is $4\frac{1}{2}$ inches, and the radius of its base 9 inches?



$9^2 \times 3 + 4.5^2 \times 4.5 \times .5236 = 1184.625 \times .5236 = 620.26965$ solid inches.

2. What is the content of a spherical segment AECD, whose height AC, is 13 inches, and diameter of the sphere A B, 48 inches?



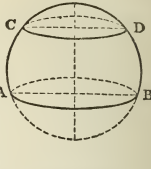
$48 \times 3 - 13 \times 2 \times 13^2 \times .5236 = 19942 \times .5236 = 10441.6312$ solid inches.

PROBLEM XIII.

To find the solidity of a frustum or zone of a sphere.

Rule.—To the sum of the squares of the radii of the two ends, add $\frac{1}{3}$ of the square of their distance, or breadth of the zone, and this sum multiplied by twice the breadth, and the product by .7854 will give the solidity; or, multiply the sum found as above directed, by the breadth or height, and the product multiplied by 1.5708, will give the solidity.

EXAMPLES.



1. What is the solid content of a zone whose greater diameter A B, is 24 inches, the lesser diameter C D, 20 inches, and the breadth or distance between the diameters A B and C D, 12 inches?

$$12^2+10^2+\frac{12^2}{3}\times 24\times .7854=5504.0832 \text{ solid inches.}$$

2. Required the solidity of the middle zone of a sphere, whose top and bottom diameters are each 3 feet, and the breadth of the zone 4 feet?

$$1.5^2+1.5^2+\frac{4^2}{3}=9.83\times 4\times 1.5708=61.7848 \text{ solid feet.}$$

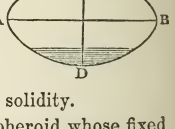
PROBLEM XIV.

To find the solidity of a spheroid.

Rule.—Multiply the square of the revolving axis by the fixed axis, and the product by .5236, and it will give the solidity required.

Note.—.5236 is = to $\frac{1}{6}$ of 3.1416.

EXAMPLES.



1. What is the solidity of a prolate spheroid whose fixed axis A B, is 100, and its revolving axis C D, 60?

$$60^2\times 100\times .5236=188496, \text{ the solidity.}$$

2. What is the solidity of an oblate spheroid whose fixed axis is 60, and its revolving axis 100?

$$100^2\times 60\times .5236=314160, \text{ the solidity.}$$

PROBLEM XV.

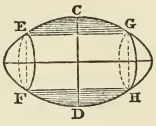
To find the content of the middle zone or frustum of a spheroid, its length, the middle diameter, and the diameter of the ends being given.

Rule.—To twice the square of the middle diameter, add the square of the diameter of one of the ends, and this sum multiplied by the length of the zone, and that product by .2618, will give the solid content.

Note.—.2618 is=$\frac{1}{12}$ of 3.1416.

EXAMPLE.

What is the solidity of the middle zone or frustum of a spheroid, the middle diameter C D, being 60, that of either of the two ends E F and G H, 36, and the length, or distance between the two ends, 70?



$60^2 \times 2 + 36^2 \times 70 \times .2618 = 155697.696$, the solidity.

PROBLEM XVI.

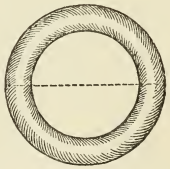
To find the convex superficies of a solid ring.

Rule—To the thickness of the ring add the inner diameter; multiply this sum by the thickness, and the product by 9.8696, the result will be the superficies required.

Note.—A solid ring may be considered as a bent cylinder; and by adding to the central space the thickness of the ring, we get the diameter of a circle, whose circumference is the length of that cylinder: 9.8696 is the square of 3.1416.

EXAMPLE.

What is the convex superficies of a cylindric ring, the thickness of which is 4 inches, and the inner diameter 18 inches?



$\overline{4+18} \times 4 \times 9.8696 = 868.5248$, the superficies.

PROBLEM XVII.

To find the solidity of a cylindric ring.

Rule.—To the thickness of the ring add the inner diameter, multiply this sum by half the square of the thickness, and the product by 9.8696, the result will be the solidity required.

EXAMPLE.

What is the solidity of a cylindric ring, whose thickness is 4 inches, and inner diameter 16 inches?

$$4+16 \times \frac{4^2}{2} \times 9.8696 = 789{,}568, \text{ the solidity.}$$

OF THE REGULAR BODIES.

A *regular body* is a solid contained under a certain number of similar and equal plane figures, and the whole that it is possible to form of these are five.

1. The *Tetraedron*, or regular pyramid, which has four equilateral triangular faces.
2. The *Hexaedron*, or cube, which has six square faces.
3. The *Octaedron*, which has eight triangular faces.
4. The *Dodecaedron*, which has twelve pentagonal faces.
5. The *Icosaedron*, which has twenty triangular faces.

The regular bodies are also called the *Platonic bodies*, from Plato, who treated of them.

Table of the surfaces and solidities of the regular bodies, the side being 1.

No. of Faces.	Name.	Surface, or area when the side is 1.	Solidity when the side is 1.
4	Tetraedron,	1.7320508	0.1178511
6	Hexaedron,	6.0000000	1.0000000
8	Octaedron,	3.4641016	0.4714045
12	Dodecaedron,	20.6457288	7.6631189
20	Icosaedron,	8.6602540	2.1816950

To find the surface of the five regular bodies.

Rule.—Multiply the tabular area or surface, by the square of the given side, and the products will be the superficies.

Note.—The surfaces of similar solids are as the squares, and their solidities as the cubes of their corresponding linear sides.

EXAMPLES.

1. Required the surface of a tetraedron, whose side is 6?
$6^2 \times 1.7320508 = 62.3538288$, the surface.
2. Required the surface of a dodecaedron, whose side is 3?
$3^2 \times 20.6457288 = 185.8115592$, the surface.

To find the solidity of the five regular bodies.

Rule.—Multiply the tabular solidity by the cube of the given side, and the product will be the solidity.

Note.—The solid content of any *regular body* is equal to its surface multiplied by $\frac{1}{3}$ of the radius of the inscribed sphere.

EXAMPLES.

1. Required the solidity of an octaedron, whose side is 8?

$8^3 \times .4714045 = 241.359104$, the solidity.

2. Required the solidity of an icosaedron, whose side is 5?

$5^3 \times 2.181695 = 272.711875$, the solidity.

The diameter of a sphere being given, to find the side of any of the regular bodies, that may either be inscribed in the sphere, or circumscribed about the sphere, or that is equal to the sphere.

Rule.—Multiply the given diameter of the sphere by the number answering to the thing sought in the following table, and the product will be the side of the regular body required.

The diameter of a sphere being 1, the side of a	That may be inscribed in the sphere, is	That may be circumscribed about the sphere, is	That is equal to the sphere, is
Tetraedron,	0.816497	2.44948	1.64417
Hexaedron,	0.577350	1.00000	0.80600
Octaedron,	0.707107	1.22474	1.03576
Dodecaedron,	0.525731	0.66158	0.62153
Icosaedron,	0.356822	0.44903	0.40883

EXAMPLES.

1. The diameter of a sphere is 6, required the side of a tetraedron that may be inscribed in it?

$6 \times .816497 = 4.898982$, side required.

2. The diameter of a sphere is 9, required the side of an octaedron, that may be circumscribed about it?

$9 \times 1.22474 = 11.02266$, side required.

3. The diameter of a sphere is 12, required the side of a dodecaedron, that is equal to the sphere?

$12 \times .62153 = 7.45836$, side required.

TABLE XVIII.

SHOWS THE SOLID CONTENT OF 1 FOOT IN LENGTH, OF CYLINDRICAL TREES, &c., AT GIRTHS, OR CIRCUMFERENCES, FROM 1 FOOT 4 INS. TO 14 FEET.

THE Table is divided into 3 double columns, each having the girths in feet and inches on the left hand; and immediately opposite each girth is found the content of 1 foot in length, at that girth, in cubic feet, and decimals of a foot.

To find the content of a tree by the Table. Take the girth of the tree in feet and inches, from which deduct from 2 to 4 inches for the thickness of the bark; find the remainder of the girth in the left-hand column of the Table, and multiply the number opposite by the length of the tree in feet; point off three places of figures on the right hand of the product, the figures on the left are cubic feet; multiply the figures pointed off by 12, and from the product again point off three places of figures on the right, the figures on the left are solid inches, or slices 1 foot square and 1 inch thick; the remainder may be again multiplied by 4, and treated in the same manner for quarters of an inch. If there are odd inches in the length, add a proportional part of 1 foot, after multiplying by the feet.

EXAMPLE.

What is the solid content of a tree 15 feet in length, and girth at the one end 128 inches, at the other 96 inches, after deducting 2 inches for the bark; giving a mean girth of 112 inches.

In the Table opposite the girth, 112 inches=9 feet 4 inches, stands 6.932, the content of 1 foot, and $6.932 \times 15 = 103.980$ feet, and the fraction, $.980 \times 12 = 11.76$, and $.76 \times 4 = 3.04$, or 103 feet $11\frac{3}{4}$ inches, the content.

If a given girth exceeds the Table, multiply the number opposite its half by 4; the product is the content of 1 foot in length by the given girth, which multiply by the given length.

EXAMPLE.

What is the solid content of a tree 12 feet in length, and girth 16 feet 6 inches?

Opposite 8 feet 3 inches, the half of the girth, stands 5.416, and $5.416 \times 4 = 21.664 \times 12 = 259.968$ feet; and on multiplying the fraction .968 by 12 and by 4, the solid content is found to be 259 feet $11\frac{1}{2}$ inches

The Table is calculated as follows:—The area of a circle, whose circumference is 1 foot=.0795775, is divided by 144, the number of square inches in a square foot=.000552632=the area of a circle whose circumference is 1 inch, in the decimal of a foot. Then, as the areas of circles are to one another as the squares of their circumferences, the square of any given circumference or girth, multiplied by this fraction and by the length, gives the solid content.

The content of the first example is thus found:—Girth, 9 feet 4 inches $=112^2=12544 \times .000552632=6.932090368 \times 1$ foot=6.932090368, which is to be multiplied by 15, the length in feet; and the product is 103.98135552, the content in cubic feet.

To save trouble in the multiplication, only three places of decimals are retained in the Table, and the third figure is increased by 1, when the figure in the fourth place is above 5.

The following Rules will meet any case that can occur, either when the girth and length, or when the diameter and length, are given, to find the solid content:—

1. Given the girth and the length, both in feet.

Multiply the square of the girth by the length, and the product by .07958; the result is the content in cubic feet.

Or, multiply the square of the girth by the length, and divide the product by 12.5664; the quotient is the content in cubic feet.

2. Given the girth in inches, and the length in feet.

Multiply the square of the girth in inches by the length in feet, and the product by .000552632; the result is the content in cubic feet.

Or, multiply the square of the girth in inches, by the length in feet, and divide the product by 1809.56; the quotient is the content in cubic feet.

3. Given the girth and the length, both in inches.

Multiply the square of the girth by the length, and the product by .000046052; the result is the content in cubic feet.

Or, multiply the square of the girth by the length, and divide the product by 21714.69; the quotient is the content in cubic feet.

Note.—As the fractional part of the divisors in the last two Rules bear but a small proportion to the integral part, when great exactness is not required, they may be omitted. It may be mentioned, that when two or more numbers are to be multiplied into one another, any one of them may be made the multiplier or the multiplicand that is most convenient.

4. Given the diameter and the length, both in feet.

Multiply the square of the diameter by the length, and the product by .7854; the result is the content in cubic feet.

Or, multiply the square of the diameter by the length, and divide the product by 1.2732; the quotient is the content in cubic feet.

5. Given the diameter in inches, and the length in feet.

Multiply the square of the diameter in inches by the length in feet, and the product by .0054542; the result is the content in cubic feet.

Or, multiply the square of the diameter in inches by the length in feet, and divide the product by 183.35; the quotient is the content in cubic feet.

6. Given the diameter and length, both in inches.

Multiply the square of the diameter by the length, and the product by .00045452; the result is the content in cubic feet.

Or, multiply the square of the diameter by the length, and divide the product by 2200.1579; the quotient is the content in cubic feet.

Note.—The fractional part of the last divisor (.1579) bearing the proportion to the integral part of only 1 to 13930 may be entirely omitted.

This most convenient and easily-remembered divisor was first made known by the late Mr. Wilson of Thornly, near Glasgow, in a work entitled "The Survey of Renfrewshire," published by him in 1812. It is the product of the reciprocal of .7853981634, the area of a

circle whose diameter is 1,=1.2732395, &c., multiplied by 1728, the cubic inches in a solid foot. The following Table shows its value and usefulness:—

	Cubic Foot.
1728 cubical inches	= 1
2200 cylindrical inches	= 1
3300 spherical inches, or spheres, 1 inch in diameter, . . .	= 1
6600 conical inches, or cones, base 1 inch diam. and height 1 in.	= 1

Rule 6 shows the method of using 2200 to find the content of cylinders.

To find the content of a sphere:—Cube the diameter in inches, and divide the product by 3300; the quotient is cubic feet.

To find the content of a cone—Multiply the square of the diameter by the height, both in inches, and divide the product by 6600; the quotient is cubic feet.

The solid content of the frustum of a cone may be found, when the dimensions are given in similar terms to any of the six cases preceding, by the following Rule:—

Square the girths or diameters of the two ends, to which add their product; multiply the sum by one-third of the length; and multiply or divide the product by the number directed in the Rule for that case which is in the same terms as the given dimensions of the frustum; the result is the content in cubic feet.

We shall calculate by this Rule the solid content of the tree, the dimensions of which are given in the first example—viz., girth at the one end 128 inches, at the other 96 inches, and length 15 feet; and which falls under case 2 of the preceding Rules.

$128^2 + 96^2 + 128 \times 96 = 37888$, $\times 15 \div 3 = 189440$, $\times .000552622 =$ 104.68871168=104 feet $8\frac{1}{4}$ inches, the solid content.

Or by division, $189440 \div 1809.56 = 104.688$ feet, as above.

It was stated at page 24, that, by the usual rule for measuring round timber, the content shown was less than the truth in the proportion of 11 to 14, or less in that proportion than the content found by the present Table. There is, however, a source of additional loss, in the fact that when the tree is measured as a cylinder, in place of being measured as the frustum of a cone, as above, the deficiency is about $8\frac{1}{2}$ inches, or $\frac{1}{147}$th part of the content. The amount of error from this cause varies in the proportion of the difference of the girths, or diameters of the two ends of the tree; which error becomes rapidly less, as the girths or diameters of the ends approach to equality. Thus, when the girths, or diameters of the two ends, are to one another as 8 is to 4, the loss, by using the mean girth, or the mean diameter, is 1 in 27; when they are to one another as 8 is to 5, the loss is 1 in $56\frac{1}{3}$; when as 8 is to 6, the loss is 1 in 147; and when they are as 8 is to 7, the loss is only 1 in 675.

The ever-varying proportions of the one end of a tree to the other, render it impossible to get a constant multiplier or divisor, by which a Table of the true content of conic frustums could be formed; but in the measuring of round tapering timber this, in general, is not of much importance—as, on the one hand, if a tree be not perfectly circular, the content will thereby be something lessened; and, on the other, if the dimensions of the two ends differ considerably, the value of the tree per cubic foot is also proportionally lessened. It may, therefore, be concluded, that if the solidity of a tree be calculated as a cylinder of its mean girth or diameter, the content is shown for practical purposes with all desirable exactness.

Girth.		Content.	Girth.		Content.	Girth.		Content.
Ft.	In.	Cubic Ft.	Ft.	In.	Cubic Ft.	Ft.	In.	Cubic Ft.
1	4	.141	5	7	2.481	9	10	7.695
1	5	.160	5	8	2.555	9	11	7.826
1	6	.179	5	9	2.631	10	0	7.958
1	7	.199	5	10	2.708	10	1	8.091
1	8	.221	5	11	2.786	10	2	8.225
1	9	.244	6	0	2.865	10	3	8.361
1	10	.267	6	1	2.945	10	4	8.497
1	11	.292	6	2	3.026	10	5	8.635
2	0	.318	6	3	3.108	10	6	8.773
2	1	.345	6	4	3.192	10	7	8.913
2	2	.374	6	5	3.276	10	8	9.054
2	3	.403	6	6	3.362	10	9	9.196
2	4	.433	6	7	3.449	10	10	9.339
2	5	.465	6	8	3.537	10	11	9.484
2	6	.497	6	9	3.626	11	0	9.629
2	7	.531	6	10	3.716	11	1	9.775
2	8	.566	6	11	3.807	11	2	9.923
2	9	.602	7	0	3.899	11	3	10.072
2	10	.639	7	1	3.993	11	4	10.221
2	11	.677	7	2	4.087	11	5	10.372
3	0	.716	7	3	4.183	11	6	10.524
3	1	.757	7	4	4.280	11	7	10.677
3	2	.798	7	5	4.377	11	8	10.831
3	3	.841	7	6	4.476	11	9	10.987
3	4	.884	7	7	4.576	11	10	11.143
3	5	.929	7	8	4.677	11	11	11.301
3	6	.975	7	9	4.780	12	0	11.459
3	7	1.022	7	10	4.883	12	1	11.619
3	8	1.070	7	11	4.987	12	2	11.780
3	9	1.119	8	0	5.093	12	3	11.942
3	10	1.169	8	1	5.200	12	4	12.105
3	11	1.221	8	2	5.307	12	5	12.269
4	0	1.273	8	3	5.416	12	6	12.434
4	1	1.327	8	4	5.526	12	7	12.600
4	2	1.382	8	5	5.637	12	8	12.768
4	3	1.437	8	6	5.749	12	9	12.936
4	4	1.494	8	7	5.863	12	10	13.106
4	5	1.552	8	8	5.977	12	11	13.277
4	6	1.611	8	9	6.093	13	0	13.449
4	7	1.672	8	10	6.209	13	1	13.622
4	8	1.733	8	11	6.327	13	2	13.796
4	9	1.795	9	0	6.446	13	3	13.971
4	10	1.859	9	1	6.566	13	4	14.147
4	11	1.924	9	2	6.687	13	5	14.325
5	0	1.989	9	3	6.809	13	6	14.503
5	1	2.056	9	4	6.932	13	7	14.683
5	2	2.124	9	5	7.056	13	8	14.863
5	3	2.193	9	6	7.182	13	9	15.045
5	4	2.264	9	7	7.308	13	10	15.228
5	5	2.335	9	8	7.436	13	11	15.412
5	6	2.407	9	9	7.565	14	0	15.597

LAND MEASURING.

Land Measuring is the art by which we ascertain the superficial content of any tract of ground.

There are various methods of obtaining the measurement, some of them requiring familiar acquaintance with mathematical treatises more intricate and comprehensive than the present work, whilst others need nothing beyond a knowledge of the simplest principles of mensuration. As the present work addresses itself entirely to practical men, we shall confine our remarks to the popular method ordinarily employed.

Land is commonly measured with what is called *Gunter's chain*. This chain is divided into 100 links, having at the end of every ten links a piece of brass fixed, with notches denoting the number of tens, so that the number of links may be readily ascertained. The *English chain* is 22 yards or 66 feet in length, and each link 7.92 inches; the *Scotch chain* is 74.1196 feet long, each link being 8.894352 inches, and both are, as remarked above, divided into 100 links. The English, or Imperial measure, is now the only legal standard in the United Kingdom, for a table of which see "*Square or Superficial Measure*," page 2.

In taking measurements in the field, the various distances are set down in links, which are afterwards reduced to acres, roods, poles, &c. The field requisites for a land-measurer are the *chain* just mentioned, a bundle of *arrows*, a *cross-staff*, and a number of *signals*. The arrows are usually ten in number, and two feet in length, each has a piece of red cloth affixed to the head, by which it is easily distinguishable at a considerable distance when stuck in the ground. The use of the arrows is to indicate the number of chains in any line of the survey. The cross-staff is a pole 10 links long, shod at one end with iron, and pointed, that it may be thrust into the earth as occasion requires. A small block of wood about 6 inches square, having grooves cut round its margin at right angles to each other, is fitted on the pole,

and slides up and down according to the height of the eye; its use is for obtaining a perpendicular from the base line of any triangle to the angular point. The signals are more or less numerous, according to the extent of the field or tract to be surveyed; their use is to mark definitely the various points and bearings; they are usually slight poles, from six to eight feet in length, with a small red flag attached to each.

Land-measuring is divided into three distinct operations. I. The actual measurements in the field. II. The plotting, or laying down on paper all the lines and angles of the field, according to a scale fixed on. III. The reducing the measurements of the various triangles, and thence obtaining the total superficial content of the whole survey. We shall take each division in order.

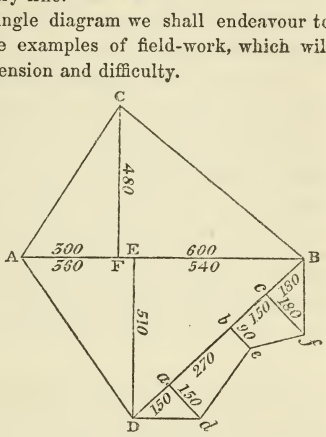
I. The land-measurer requires an assistant in the field, who is called the *leader*, as it is his business to lead or carry out the chain under the direction of the surveyor, who, for the sake of distinction, is named the *follower*. The leader is first directed to fix the signals at the angular points of the field; he then takes the end of the chain in one hand, and the ring of arrows and the cross-staff in the other, and proceeds in the measurement of the *longest* or *base* line, under the guidance of the follower, who holds the other end of the chain, and has his field-book ready to note down the various measurements taken. The leader fixes an arrow when he has extended the chain to its full length, and proceeds onward till the follower reaches this arrow, when the chain is again drawn tight, the leader leaving another arrow, and the follower taking up the one first left. The entire line is thus passed over, the leader leaving his arrows as the chain runs out, and the follower gathering them up as the data of the measurement. The follower must be careful to observe that the leader keeps in the line between him and the signal towards which they are measuring; and he must also direct him to give information when he arrives at any point on the line whence a perpendicular may be raised to the angles on either side. When the leader

intimates his arrival at any such point, both he and the follower stop, draw the chain tight, and leave it extended on the ground. The follower does not remove the last arrow for the present, but leaves it standing, and lays those he has gathered up beside it; he then proceeds to the place where the leader has stopped, and taking the cross-staff, ascertains the precise point whence the perpendicular can be raised to the angle. This is done in a very simple manner: the cross-staff is planted close to the chain, and one of the grooves made to coincide with it; or, in other words, on looking through the groove in opposite directions, the measurer must see the point whence he set out, and the point to which he is tending; then looking along one of the grooves at right angles, (without disturbing the position of the cross-staff) he must see whether it bears directly on the angular point; if it do not, the cross-staff must be moved backward or forward along the chain till the precise point is determined; its position on the line of measurement is then noted in the field-book, an arrow is planted at the spot, and the leader and follower taking their respective places, proceed with the measurement of the remainder of the line; which having completed, the various perpendiculars are measured from the points indicated by the arrows.

If the subject of the survey be a triangular or quadrilateral field with *straight* sides, the field work is completed when the longest line, (that is, the base in the triangle, and the diagonal in the quadrilateral) and the perpendiculars are measured. If the field is contained under a greater number of sides than four, it will be necessary to intersect it with two or more lines, from each of which perpendiculars must be erected to the angular points along the boundary. Very frequently also, there will be what is termed *offsets*, or the irregularities of a crooked boundary. In this case it is necessary to take a straight line between two angles of the field where these occur, and measure offsets or perpendiculars from that line towards every bend or angle in the boundary, by which means a number of small triangles or trapezoids are obtained, to be included in or deducted

from the total area, according as they are situated *within* or *without* the boundary line.

By the aid of a single diagram we shall endeavour to give a few illustrative examples of field-work, which will remove all misapprehension and difficulty.



Let it be required to find the content of the triangular field A B C. The field measurements will be the line A B = 900 links, or rather A F = 300, and F B = 600, and the perpendicular F C = 480; from these the subsequent operations of plotting and estimating the content can readily be performed, as will presently be shown.

We may here remark that the plan observed in keeping the field-book is by no means uniform, nearly every surveyor having his own peculiar method; and so long as there *is method*, and the memoranda be arranged in a way that the measurer can himself fully comprehend them when he leaves the field, it is of small consequence what plan may be adopted. Usually, however, the page of the field-book is divided into three columns; the centre one is occupied by the measurements of the principal lines, and in the right and left hand columns, are entered the perpendiculars and offsets from those lines. Let us suppose that it is required to find the measurement of a quadrilateral field A B C D. The data to be obtained in the field are these: the diagonal A B, 900 links, and the perpendicular F C, 480, as formerly; A E, 360 links, and the perpendicular D E, 510. Again, we will suppose one side of the field has the crooked and irregular boundary D *d e f* B; in this case, in addition

to those already mentioned, the field measurements will be the line D B, 750 links, distinguished into D *a* 150, *a b* 270, *b c* 150, and *c* B 180; and the perpendicular offsets *a d* 150, *b e* 90, and *c f* 180.

Offsets are usually measured, unless they be of great length, with the cross-staff, which is made 10 links long for this purpose. If, however, these perpendiculars exceed two or three lengths of the staff, it is better to use the chain. These offsets, it is also to be noticed, are to be measured in the course of ascertaining the line DB.

In simple surveys, such as the preceding examples refer to, it is usual to sketch the form of the field on a page of the book, and enter all the measurements and remarks on the corresponding parts of the sketch; this is an excellent plan, and should always be adopted where the case will admit of it.

II. We come now to the plotting, or laying down the true figure of the field on paper, according to some determinate scale; and this operation is no less simple than that of taking the field measurements. The surveyor requires to be provided with a case of drawing instruments, containing compasses, steel pen, parallel ruler, &c.; and also a plotting scale, graduated into chains, and parts of a chain. The paper on which the plotting is to be made, should be damped on the back and fastened down by pasting the edges on a drawing-board of suitable dimensions. When dry, the paper thus prepared presents a smooth and uniform surface; whilst the board on which it is laid prevents the points of the compasses from piercing deeply into it and making unsightly holes.

We will begin by plotting the field A B C, the measurement of which forms the first example in the preceding section.

Draw an indefinite line and set off from the plotting scale the base AB=900 links, marking with the point of a pencil the terminations A and B; set off on A B the distance AF=300 links; from the point F, raise an indefinite perpendicular, and set off on it FC=480 links; draw lines

connecting the points A B, B C, A C, and the field is correctly plotted. The field A B C D, it will be obvious, merely requires the erection of the perpendicular D E= 510 links, and drawing lines connecting the points AD, DB, in addition to the foregoing operation.

In the third example, where the boundary D *d e f* B, is irregular; on the line D B set off D *a*=150 links, *a b*= 270 links, *b c*=150 links, and *c* B=180 links; and from the points *a, b, c*, raise the perpendiculars *a d*=150 links, *b e*= 90 links, and *c f*=180 links. Draw lines connecting the points D *d*, *d e*, *e f*, *f* B, which finishes the plotting of the whole field A C B *f e d* D.

It is usual to place the north side of the plan uppermost, with a flower-de-luce to indicate the north point, and in a vacant place to insert a scale of equal parts or chains, and the title of the plan.

III. The next thing to be done is the computing the contents of the various triangles, and trapezoids, and bringing out the total area of the whole survey, which is equally simple with the preceding operations.

Rules for measuring figures of every form are given in a former part of this work, under the head of Mensuration of Superficies, which may be referred to. But we shall here mention two or three things, a knowledge of which is needed in the calculation of almost every survey.

1. The base and perpendicular of any triangle multiplied into each other, gives *twice* the area of such triangle; or, the base multiplied by half the perpendicular, is equal to the area of the triangle.

2. The sum of the parallel sides of any trapezoid, (*i. e.* a four-sided figure having two of its sides parallel), multiplied by the perpendicular distance between them, gives twice the area of such trapezoid; or, half the sum of the parallel sides, multiplied by the perpendicular, is equal to the area of the trapezoid.

3. The number of square links in an acre is 100,000. Hence this rule:—square links are reduced to acres by

cutting off five figures to the right, as a remainder, which is to be multiplied successively by 4 for roods, 40 for poles, $30\frac{1}{4}$ for yards, and 9 for feet, at each multiplication cutting off 5 figures to the right; the numbers on the left of the point being acres, roods, poles, yards, and feet.

The following calculation will sufficiently illustrate the computing of surveys.

Required the area of the field A C B *f e d* D?

		Links.	
Triangle A B C	= A B 900 × C E 480	=	432000
Triangle A B D	= A B 900 × D E 510	=	459000
	Offsets.		
Triangle D *a d*	= D *a* 150 × *a d* 150	=	22500
Trapezoid *a d e b*	= *a d* 150 + *b e* 90 × *a b* 270	=	64800
Trapezoid *b e f c*	= *b e* 90 + *c f* 180 × *b c* 150	=	40500
Triangle *c f* B	= *c f* 180 × *c* B 180	=	32400
	according to the Rule, divide by 2		1051200
	square links		5.25600
			4
			1.02400
			40
			.96000
			$30\frac{1}{4}$
			28.80000
			24000
			29.04000
			9
			.36000

Content of the field 5 acres, 1 rood, 29 yards, and about $\frac{1}{3}$ of a foot.

APPENDIX II.

MEASUREMENTS AND PRICES OF SAWN TIMBER.

THE following Tables, which have been compiled for the present edition of PEDDIE'S PRACTICAL MEASURER, introduce a new and important feature into the work. In previous editions no Tables were included specially directed to the measurement of sawn timber, as imported from the Baltic and America. Such tabulated assistance is however of daily requirement by all who are in any way connected with the buying and selling of wood. It is now added with a view to meet an acknowledged want, and to render this Work a full and complete Tabular Guide for the use of the Wood Merchant, Builder, Carpenter, Joiner, and Artificers generally. No similar series of Tables has hitherto been published, and no other compendium includes so complete a collection of Tables suited for the purposes of the Timber and Building trades.

TABLE XIX.—This explanatory Table gives the value of the Christiania, Drammen, Petersburg, and Quebec Standards, and Hundreds, in superficial, cubic, and running feet of various scantlings. It likewise gives the comparative value of the different standards, and rules whereby the one may be readily converted into the other; and provides data for the construction of the succeeding Tables.

TABLE XX.—This Table shows the number of running feet required to make a Christiania, Drammen, Petersburg, or Quebec Hundred, in all the various scantlings usually imported.

EXAMPLE.

Required the number of running feet of deals or battens 11 inches wide, by $2\frac{1}{2}$ inches thick, to make a Quebec Hundred? Run down the first column till you find the scantling 11 $\times$ $2\frac{1}{2}$, and opposite this, under Quebec, is 1200, the number of feet required.

TABLE XIX.

VALUE OF THE DIFFERENT STANDARDS.

1 Deal or Batten,	11 ft. $9 \times 1\frac{1}{4}$	=	a Christiania Standard.	
$10\frac{5}{16}$ Superficial feet of	1 inch	=	,,	,,
$8\frac{1}{4}$,, ,,	$1\frac{1}{4}$,,	=	,,	,,
120 Deals or Battens,	11 ft. $9 \times 1\frac{1}{4}$	=	,,	Hundred.
60 ,, ,,	15 ,, $11 \times 1\frac{1}{2}$	=	,,	,,
1320 Running feet,	$9 \times 1\frac{1}{4}$	=	,,	,,
900 ,, ,,	$11 \times 1\frac{1}{3}$	=	,,	,,
$1237\frac{1}{2}$ Superficial feet of	1 inch	=	,,	,,
990 ,, ,,	$1\frac{1}{4}$,,	=	,,	,,
$103\frac{1}{8}$ Cubic feet		=	,,	,,

A Christiania Standard is	=	$\frac{11}{13}$	of a Drammen Standard.
,, ,,		$\frac{6}{8}$,,	Petersburg ,,
,, ,,		$\frac{8}{8}$,,	Quebec ,,

To convert a Christiania into a	Drammen Standard	× 11 ÷ 13.	
,, ,, ,,	Petersburg ,,	× 5 ÷ 8.	
,, ,, ,,	Quebec ,,	× 3 ÷ 8.	

1 Deal or Batten,	9 ft. $6\frac{1}{2} \times 2\frac{1}{2}$	=	a Drammen Standard.
$12\frac{3}{16}$ Superficial feet of	1 inch	=	,, ,,
$9\frac{3}{4}$,, ,,	$1\frac{1}{4}$,,	=	,, ,,
120 Deals or Battens,	9 ft. $6\frac{1}{2} \times 2\frac{1}{2}$	=	,, Hundred.
120 ,, ,,	13 ,, 9 $\times 1\frac{1}{4}$	=	,, ,,
60 ,, ,,	18 ,, $6\frac{1}{2} \times 2\frac{1}{2}$	=	,, ,,
1560 Running feet,	$9 \times 1\frac{1}{4}$	=	,, ,,
1080 ,, ,,	$6\frac{1}{2} \times 2\frac{1}{2}$	=	,, ,,
$1462\frac{1}{2}$ Superficial feet of	1 inch	=	,, ,,
1170 ,, ,,	$1\frac{1}{4}$,,	=	,, ,,
$121\frac{7}{8}$ Cubic feet		=	,, ,,

A Drammen Standard is	=	$1\frac{3}{11}$	of a Christiania Standard.
,, ,,		$\frac{65}{88}$,,	Petersburg ,,
,, ,,		$\frac{39}{88}$,,	Quebec ,,

To convert a Drammen into a	Christiania Standard	× 13 ÷ 11.	
,, ,, ,,	Petersburg ,,	× 65 ÷ 88.	
,, ,, ,,	Quebec ,,	× 39 ÷ 88.	

TABLE XIX. *(continued).*—VALUE OF THE DIFFERENT STANDARDS.

1 Deal or Batten,	12 ft. 11 × 1½	=	Petersburg Standard.
16½ Superficial feet of	1 inch	=	,, ,,
11 ,, ,,	1½ ,,	=	,, ,,
120 Deals or Battens,	12 ft. 11 × 1½	=	,, Hundred.
60 ,, ,,	12 ,, 11 × 3	=	,, ,,
1440 Running feet,	11 × 1½	=	,, ,,
720 ,, ,,	11 × 3	=	,, ,,
1980 Superficial feet of	1 inch	=	,, ,,
660 ,, ,,	3 ,,	=	,, ,,
165 Cubic feet		=	,, ,,

A Petersburg Standard is		=	1⅗ of a Christiania Standard.
,, ,,			1²³⁄₆₅ ,, Drammen ,,
,, ,,			⅝ ,, Quebec ,,

To convert a Petersburg into a Christiania Standard × 8 ÷ 5.
,, ,, ,, Drammen ,, × 88 ÷ 65.
,, ,, ,, Quebec ,, × 3 ÷ 5.

1 Deal or Batten,	12 ft. 11 × 2½	=	Quebec Standard.
27½ Superficial feet of	1 inch	=	,, ,,
9⅛ ,, ,,	3 ,,	=	,, ,,
100 Deals or Battens,	12 ft. 11 × 2½	=	,, Hundred.
100 ,, ,,	10 ,, 11 × 3	=	,, ,,
1000 Running feet of	11 × 3	=	,, ,,
2750 Superficial feet of	1 inch	=	,, ,,
916⅔ ,, ,,	3 ,,	=	,, ,,
229⅙ Cubic feet		=	,, ,,
3300 Superficial feet of	1 inch	=	,, long ,,
120 Deals or Battens,	10 ft. 11 × 3	=	,, ,, ,,

A Quebec Standard is		=	2⅔ of a Christiania Standard.
,, ,,			2¹⁰⁄₃₉ ,, Drammen ,,
,, ,,			1⅔ ,, Petersburg ,,

To convert a Quebec into a Christiania Standard × 8 ÷ 3.
,, ,, ,, Drammen ,, × 88 ÷ 39.
,, ,, ,, Petersburg ,, × 5 ÷ 3.

TABLE XX.

RUNNING FEET OF VARIOUS SCANTLINGS REQUIRED TO MAKE A HUNDRED.

Breadth and Thickness in Inches.	Running Feet to a Christ. Hund.	Running Feet to a Dram. Hund.	Running Feet to a Peters. Hund.	Running Feet to a Queb. Hund.
6 × 1	2475·00	2925·00	3960·00	5500·00
6 × 1¼	1980·00	2340·00	3168·00	4400·00
6 × 1½	1650·00	1950·00	2640·00	3666·66
6 × 1¾	1414·29	1671·43	2262·86	3142·86
6 × 2	1237·50	1462·50	1980·00	2750·00
6 × 2½	990·00	1170·00	1584·00	2200·00
6 × 3	825·00	975·00	1320·00	1833·33
6½ × 1	2284·61	2700·00	3655·39	5076·92
6½ × 1¼	1827·69	2160·00	2924·31	4061·54
6½ × 1½	1523·08	1800·00	2436·92	3384·62
6½ × 2½	913·85	1080·00	1462·16	2030·77
7 × 1	2121·43	2507·14	3394·29	4714·29
7 × 1¼	1697·14	2005·71	2715·43	3771·43
7 × 1½	1414·29	1671·43	2262·86	3142·86
7 × 1¾	1212·24	1432·65	1939·59	2693·88
7 × 2	1060·71	1253·57	1697·14	2357·14
7 × 2¼	942·86	1114·29	1508·57	2095·24
7 × 2½	848·57	1002·86	1357·71	1885·71
7 × 2¾	771·43	911·69	1234·29	1714·28
7 × 3	707·14	835·71	1131·43	1571·43
8 × 1	1856·25	2193·75	2970·00	4125·00
8 × 1¼	1485·00	1755·00	2376·00	3300·00
8 × 1½	1237·50	1462·50	1980·00	2750·00
8 × 1¾	1060·71	1253·57	1697·14	2357·14
8 × 2	928·12	1096·87	1485·00	2062·50
8 × 2¼	825·00	975·00	1320·00	1833·33
8 × 2½	742·50	877·50	1188·00	1650·00
8 × 2¾	675·00	797·73	1080·00	1500·00
8 × 3	618·75	731·25	990·00	1375·00
9 × 1	1650·00	1950·00	2640·00	3666·66
9 × 1¼	1320·00	1560·00	2112·00	2933·33
9 × 1½	1100·00	1300·00	1760·00	2444·44
9 × 1¾	942·86	1114·29	1508·57	2095·24
9 × 2	825·00	975·00	1320·00	1833·33
9 × 2¼	733·33	866·67	1173·33	1629·63
9 × 2½	660·00	780·00	1056·00	1466·66
9 × 2¾	600·00	709·09	960·00	1333·33
9 × 3	550·00	650·00	880·00	1222·22

TABLE XX. (*continued*).—RUNNING FEET OF VARIOUS SCANTLINGS REQUIRED TO MAKE A HUNDRED.

Breadth and Thickness. in Inches.	Running Feet to a Christ. Hund.	Running Feet to a Dram. Hund.	Running Feet to a Peters. Hund.	Running Feet to a Queb. Hund.
10× 1	1485·00	1755·00	2376·00	3300·00
10× 1¼	1188·00	1404·00	1900·80	2640·00
10× 1½	990·00	1170·00	1584·00	2200·00
10× 1¾	848·57	1002·86	1357·71	1885·71
10× 2	742·50	877·50	1188·00	1650·00
10× 2¼	660·00	980·00	1056·00	1466·66
10× 2½	594·00	702·00	950·40	1320·00
10× 2¾	540·00	638·18	864·00	1200·00
10× 3	495·00	585·00	792·00	1100·00
11× 1	1350·00	1595·45	2160·00	3000·00
11× 1¼	1080·00	1276·36	1728·00	2400·00
11× 1½	900·00	1063·64	1440·00	2000·00
11× 1¾	771·43	911·68	1234·29	1714·29
11× 2	675·00	797·73	1080·00	1500·00
11× 2¼	600·00	709·09	960·00	1333·33
11× 2½	540·00	638·18	864·00	1200·00
11× 2¾	490·91	580·16	785·45	1090·90
11× 3	450·00	531·82	720·00	1000·00
12× 1	1237·50	1462·50	1980·00	2750·00
12× 1¼	990·00	1170·00	1584·00	2200·00
12× 1½	825·00	975·00	1320·00	1833·33
12× 1¾	707·14	835·71	1131·43	1571·43
12× 2	618·75	731·25	990·00	1375·00
12× 2¼	550·00	650·00	880·00	1222·22
12× 2½	495·00	585·00	792·00	1100·00
12× 2¾	450·00	531·82	720·00	1000·00
12× 3	412·50	487·50	660·00	916·66
13× 3	380·77	450·00	609·43	846·15
14× 3	353·57	417·86	565·71	785·71
15× 3	330·00	390·00	528·00	733·33
16× 3	309·37	365·62	495·00	687·50
17× 3	291·18	344·12	465·88	647·09
18× 3	275·00	325·00	440·00	611·11
19× 3	260·53	307·89	416·84	578·95
20× 3	247·50	292·50	396·00	550·00
21× 3	235·71	278·57	377·14	523·81
22× 3	225·00	265·09	360·00	500·00
23× 3	215·22	253·56	344·33	478·26

TABLE XXI.

TO FIND THE SUPERFICIAL FEET OF INCH WOOD CONTAINED IN DEALS OR BATTENS OF VARIOUS SCANTLINGS FROM 6 INCHES × 1 INCH, TO 19 INCHES × 3 INCHES.

In this Table sawn timber in all the various scantlings usually imported, is reduced to an uniform standard of one inch thick, and the number of superficial feet of inch wood, contained in any number of running feet of deals or battens, is found by the Table as follows.

EXAMPLE.

Required the number of superficial feet of inch wood, in five dozens of Petersburg Standard battens, each 12 feet long, 11 inches wide, and 1½ inch thick?

Five dozens are equal to 60, which being multiplied by 12, the length of each batten, gives 720 feet. Turn to that page of the Table where you find the scantling 11 × 1½ at the top, run down the first column till you reach 700, opposite to this, and under the scantling 11 × 1½, is—962 ft. 6 in. opposite 20, and under the same scantling, is 27 6

which being added, gives . . . 990 0 = the number of feet of inch wood, contained in five dozens of Petersburg standard battens, as required.

TABLE XXII. (p. 431).

This is a Table of equivalents; each column showing the same value under different denominations, as for example, 150 superficial feet of 1 inch, are equal to 12 feet 6 inches cubic measure, or 14·55 Christiania Standards, &c., &c., or 24 Petersburg Standards are equal to 396 superficial feet of 1 inch thick, or 33 cubic feet.

Run. Feet.	Inches. 6 × 1	Inches. 6 × 1½	Inches. 6 × 1¼	Run. Feet.	Inches. 6 × 1	Inches. 6 × 1½	Inches. 6 × 1½
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	0 6	0 7½	0 9	57	28 6	35 7½	42 9
2	1 0	1 3	1 6	58	29 0	36 3	43 6
3	1 6	1 10½	2 3	59	29 6	36 10½	44 3
4	2 0	2 6	3 0	60	30 0	37 6	45 0
5	2 6	3 1½	3 9	61	30 6	38 1½	45 9
6	3 0	3 9	4 6	62	31 0	38 9	46 6
7	3 6	4 4½	5 3	63	31 6	39 4½	47 3
8	4 0	5 0	6 0	64	32 0	40 0	48 0
9	4 6	5 7½	6 9	65	32 6	40 7½	48 9
10	5 0	6 3	7 6	66	33 0	41 3	49 6
11	5 6	6 10½	8 3	67	33 6	41 10½	50 3
12	6 0	7 6	9 0	68	34 0	42 6	51 0
13	6 6	8 1½	9 9	69	34 6	43 1½	51 9
14	7 0	8 9	10 6	70	35 0	43 9	52 6
15	7 6	9 4½	11 3	71	35 6	44 4½	53 3
16	8 0	10 0	12 0	72	36 0	45 0	54 0
17	8 6	10 7½	12 9	73	36 6	45 7½	54 9
18	9 0	11 3	13 6	74	37 0	46 3	55 6
19	9 6	11 10½	14 3	75	37 6	46 10½	56 3
20	10 0	12 6	15 0	76	38 0	47 6	57 0
21	10 6	13 1½	15 9	77	38 6	48 1½	57 9
22	11 0	13 9	16 6	78	39 0	48 9	58 6
23	11 6	14 4½	17 3	79	39 6	49 4½	59 3
24	12 0	15 0	18 0	80	40 0	50 0	60 0
25	12 6	15 7½	18 9	81	40 6	50 7½	60 9
26	13 0	16 3	19 6	82	41 0	51 3	61 6
27	13 6	16 10½	20 3	83	41 6	51 10½	62 3
28	14 0	17 6	21 0	84	42 0	52 6	63 0
29	14 6	18 1½	21 9	85	42 6	53 1½	63 9
30	15 0	18 9	22 6	86	43 0	53 9	64 6
31	15 6	19 4½	23 3	87	43 6	54 4½	65 3
32	16 0	20 0	24 0	88	44 0	55 0	66 0
33	16 6	20 7½	24 9	89	44 6	55 7½	66 9
34	17 0	21 3	25 6	90	45 0	56 3	67 6
35	17 6	21 10½	26 3	91	45 6	56 10½	68 3
36	18 0	22 6	27 0	92	46 0	57 6	69 0
37	18 6	23 1½	27 9	93	46 6	58 1½	69 9
38	19 0	23 9	28 6	94	47 0	58 9	70 6
39	19 6	24 4½	29 3	95	47 6	59 4½	71 3
40	20 0	25 0	30 0	96	48 0	60 0	72 0
41	20 6	25 7½	30 9	97	48 6	60 7½	72 9
42	21 0	26 3	31 6	98	49 0	61 3	73 6
43	21 6	26 10½	32 3	99	49 6	61 10½	74 3
44	22 0	27 6	33 0	100	50 0	62 6	75 0
45	22 6	28 1½	33 9	200	100 0	125 0	150 0
46	23 0	28 9	34 6	300	150 0	187 6	225 0
47	23 6	29 4½	35 3	400	200 0	250 0	300 0
48	24 0	30 0	36 0	500	250 0	312 6	375 0
49	24 6	30 7½	36 9	600	300 0	375 0	450 0
50	25 0	31 3	37 6	700	350 0	437 6	525 0
51	25 6	31 10½	38 3	800	400 0	500 0	600 0
52	26 0	32 6	39 0	900	450 0	562 6	675 0
53	26 6	33 1½	39 9	1000	500 0	625 0	750 0
54	27 0	33 9	40 6	2000	1000 0	1250 0	1500 0
55	27 6	34 4½	41 3	3000	1500 0	1875 0	2250 0
56	28 0	35 0	42 0	4000	2000 0	2500 0	3000 0

Run. Feet.	Inches. 6 × 1¾	Inches. 6 × 2	Inches. 6 × 2½	Run. Feet.	Inches. 6 × 1¾	Inches. 6 × 2	Inches. 6 × 2½
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	0 10½	1 0	1 3	57	49 10½	57 0	71 3
2	1 9	2 0	2 6	58	50 9	58 0	72 6
3	2 7½	3 0	3 9	59	51 7½	59 0	73 9
4	3 6	4 0	5 0	60	52 6	60 0	75 0
5	4 4½	5 0	6 3	61	53 4½	61 0	76 3
6	5 3	6 0	7 6	62	54 3	62 0	77 6
7	6 1½	7 0	8 9	63	55 1½	63 0	78 9
8	7 0	8 0	10 0	64	56 0	64 0	80 0
9	7 10½	9 0	11 3	65	56 10½	65 0	81 3
10	8 9	10 0	12 6	66	57 9	66 0	82 6
11	9 7½	11 0	13 9	67	58 7½	67 0	83 9
12	10 6	12 0	15 0	68	59 6	68 0	85 0
13	11 4½	13 0	16 3	69	60 4½	69 0	86 3
14	12 3	14 0	17 6	70	61 3	70 0	87 6
15	13 1½	15 0	18 9	71	62 1½	71 0	88 9
16	14 0	16 0	20 0	72	63 0	72 0	90 0
17	14 10½	17 0	21 3	73	63 10½	73 0	91 3
18	15 9	18 0	22 6	74	64 9	74 0	92 6
19	16 7½	19 0	23 9	75	65 7½	75 0	93 9
20	17 6	20 0	25 0	76	66 6	76 0	95 0
21	18 4½	21 0	26 3	77	67 4½	77 0	96 3
22	19 3	22 0	27 6	78	68 3	78 0	97 6
23	20 1½	23 0	28 9	79	69 1½	79 0	98 9
24	21 0	24 0	30 0	80	70 0	80 0	100 0
25	21 10½	25 0	31 3	81	70 10½	81 0	101 3
26	22 9	26 0	32 6	82	71 9	82 0	102 6
27	23 7½	27 0	33 9	83	72 7½	83 0	103 9
28	24 6	28 0	35 0	84	73 6	84 0	105 0
29	25 4½	29 0	36 3	85	74 4½	85 0	106 3
30	26 3	30 0	37 6	86	75 3	86 0	107 6
31	27 1½	31 0	38 9	87	76 1½	87 0	108 9
32	28 0	32 0	40 0	88	77 0	88 0	110 0
33	28 10½	33 0	41 3	89	77 10½	89 0	111 3
34	29 9	34 0	42 6	90	78 9	90 0	112 6
35	30 7½	35 0	43 9	91	79 7½	91 0	113 9
36	31 6	36 0	45 0	92	80 6	92 0	115 0
37	32 4½	37 0	46 3	93	81 4½	93 0	116 3
38	33 3	38 0	47 6	94	82 3	94 0	117 6
39	34 1½	39 0	48 9	95	83 1½	95 0	118 9
40	35 0	40 0	50 0	96	84 0	96 0	120 0
41	35 10½	41 0	51 3	97	84 10½	97 0	121 3
42	36 9	42 0	52 6	98	85 9	98 0	122 6
43	37 7½	43 0	53 9	99	86 7½	99 0	123 9
44	38 6	44 0	55 0	100	87 6	100 0	125 0
45	39 4½	45 0	56 3	200	175 0	200 0	250 0
46	40 3	46 0	57 6	300	262 6	300 0	375 0
47	41 1½	47 0	58 9	400	350 0	400 0	500 0
48	42 0	48 0	60 0	500	437 6	500 0	625 0
49	42 10½	49 0	61 3	600	525 0	600 0	750 0
50	43 9	50 0	62 6	700	612 6	700 0	875 0
51	44 7½	51 0	63 9	800	700 0	800 0	1000 0
52	45 6	52 0	65 0	900	787 6	900 0	1125 0
53	46 4½	53 0	66 3	1000	875 0	1000 0	1250 0
54	47 3	54 0	67 6	2000	1750 0	2000 0	2500 0
55	48 1½	55 0	68 9	3000	2625 0	3000 0	3750 0
56	49 0	56 0	70 0	4000	3500 0	4000 0	5000 0

Run. Feet.	Inches. 6 × 3	Inches. 6½ × 1	Inches. 6½ × 1¼	Run. Feet.	Inches. 6 × 3	Inches. 6½ × 1	Inches. 6½ × 1¼
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 6	0 6½	0 8⅛	57	85 6	30 10½	38 7⅛
2	3 0	1 1	1 4¼	58	87 0	31 5	39 3¼
3	4 6	1 7½	2 0⅜	59	88 6	31 11½	39 11⅜
4	6 0	2 2	2 8½	60	90 0	32 6	40 7½
5	7 6	2 8½	3 4⅜	61	91 6	33 0½	41 3⅝
6	9 0	3 3	4 0¾	62	93 0	33 7	41 11¾
7	10 6	3 9½	4 8⅛	63	94 6	34 1½	42 7⅞
8	12 0	4 4	5 5	64	96 0	34 8	43 4
9	13 6	4 10½	6 1⅛	65	97 6	35 2½	44 0⅛
10	15 0	5 5	6 9¼	66	99 0	35 9	44 8¼
11	16 6	5 11½	7 5⅜	67	100 6	36 3½	45 4⅜
12	18 0	6 6	8 1½	68	102 0	36 10	46 0½
13	19 6	7 0½	8 9⅜	69	103 6	37 4½	46 8⅝
14	21 0	7 7	9 5¾	70	105 0	37 11	47 4¾
15	22 6	8 1½	10 1⅝	71	106 6	38 5½	48 0⅞
16	24 0	8 8	10 10	72	108 0	39 0	48 9
17	25 6	9 2½	11 6⅛	73	109 6	39 6½	49 5⅛
18	27 0	9 9	12 2¼	74	111 0	40 1	50 1¼
19	28 6	10 3½	12 10⅜	75	112 6	40 7½	50 9⅜
20	30 0	10 10	13 6½	76	114 0	41 2	51 5½
21	31 6	11 4½	14 2⅝	77	115 6	41 8½	52 1⅝
22	33 0	11 11	14 10¾	78	117 0	42 3	52 9¾
23	34 6	12 5½	15 6⅞	79	118 6	42 9½	53 5⅞
24	36 0	13 0	16 3	80	120 0	43 4	54 2
25	37 6	13 6½	16 11⅛	81	121 6	43 10½	54 10⅛
26	39 0	14 1	17 7¼	82	123 0	44 5	55 6¼
27	40 6	14 7½	18 3⅜	83	124 6	44 11½	56 2⅜
28	42 0	15 2	18 11½	84	126 0	45 6	56 10½
29	43 6	15 8½	19 7⅝	85	127 6	46 0½	57 6⅝
30	45 0	16 3	20 3¾	86	129 0	46 7	58 2¾
31	46 6	16 9½	20 11⅞	87	130 6	47 1½	58 10⅞
32	48 0	17 4	21 8	88	132 0	47 8	59 7
33	49 6	17 10½	22 4⅛	89	133 6	48 2½	60 3⅛
34	51 0	18 5	23 0¼	90	135 0	48 9	60 11¼
35	52 6	18 11½	23 8⅜	91	136 6	49 3½	61 7⅜
36	54 0	19 6	24 4½	92	138 0	49 10	62 3½
37	55 6	20 0½	25 0⅝	93	139 6	50 4½	62 11⅝
38	57 0	20 7	25 8¾	94	141 0	50 11	63 7¾
39	58 6	21 1½	26 4⅞	95	142 6	51 5½	64 3⅞
40	60 0	21 8	27 1	96	144 0	52 0	65 0
41	61 6	22 2½	27 9⅛	97	145 6	52 6½	65 8⅛
42	63 0	22 9	28 5¼	98	147 0	53 1	66 4¼
43	64 6	23 3½	29 1⅜	99	148 6	53 7½	67 0⅜
44	66 0	23 10	29 9½	100	150 0	54 2	67 8½
45	67 6	24 4½	30 5⅝	200	300 0	108 4	135 5
46	69 0	24 11	31 1¾	300	450 0	162 6	203 1½
47	70 6	25 5½	31 9⅞	400	600 0	216 8	270 10
48	72 0	26 0	32 6	500	750 0	270 10	338 6½
49	73 6	26 6½	33 2⅛	600	900 0	325 0	406 3
50	75 0	27 1	33 10¼	700	1050 0	379 2	473 11½
51	76 6	27 7½	34 6⅜	800	1200 0	433 4	541 8
52	78 0	28 2	35 2½	900	1350 0	487 6	609 4½
53	79 6	28 8½	35 10⅝	1000	1500 0	541 8	677 1
54	81 0	29 3	36 6¾	2000	3000 0	1083 4	1354 2
55	82 6	29 9½	37 2⅞	3000	4500 0	1625 0	2031 3
56	84 0	30 4	37 11	4000	6000 0	2166 8	2708 4

Run. Feet.	Inches. $6\frac{1}{2} \times 1\frac{1}{2}$	Inches. $6\frac{1}{2} \times 2\frac{1}{2}$	Inches. 7×1	Run. Feet.	Inches. $6\frac{1}{2} \times 1\frac{1}{2}$	Inches. $6\frac{1}{2} \times 2\frac{1}{2}$	Inches. 7×1
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	0 $9\frac{3}{4}$	1 $4\frac{1}{4}$	0 7	57	46 $3\frac{3}{4}$	77 $2\frac{1}{2}$	33 3
2	1 $7\frac{1}{2}$	2 $8\frac{3}{4}$	1 2	58	47 $1\frac{1}{2}$	78 $6\frac{3}{4}$	33 10
3	2 $5\frac{1}{4}$	4 $0\frac{1}{4}$	1 9	59	47 $11\frac{1}{4}$	79 $10\frac{3}{4}$	34 5
4	3 3	5 5	2 4	60	48 9	81 3	35 0
5	4 $0\frac{3}{4}$	6 $9\frac{1}{4}$	2 11	61	49 $6\frac{3}{4}$	82 $7\frac{1}{4}$	35 7
6	4 $10\frac{1}{2}$	8 $1\frac{1}{2}$	3 6	62	50 $4\frac{1}{2}$	83 $11\frac{1}{2}$	36 2
7	5 $8\frac{1}{4}$	9 $5\frac{3}{4}$	4 1	63	51 $2\frac{1}{4}$	85 $3\frac{3}{4}$	36 9
8	6 6	10 10	4 8	64	52 0	86 8	37 4
9	7 $3\frac{3}{4}$	12 $2\frac{1}{4}$	5 3	65	52 $9\frac{3}{4}$	88 $0\frac{1}{4}$	37 11
10	8 $1\frac{1}{2}$	13 $6\frac{1}{2}$	5 10	66	53 $7\frac{1}{2}$	89 $4\frac{1}{2}$	38 6
11	8 $11\frac{1}{4}$	14 $10\frac{3}{4}$	6 5	67	54 $5\frac{1}{4}$	90 $8\frac{1}{4}$	39 1
12	9 9	16 3	7 0	68	55 3	92 1	39 8
13	10 $6\frac{3}{4}$	17 $7\frac{1}{4}$	7 7	69	56 $0\frac{3}{4}$	93 $5\frac{1}{2}$	40 3
14	11 $4\frac{1}{2}$	18 $11\frac{1}{2}$	8 2	70	56 $10\frac{1}{2}$	94 $9\frac{1}{2}$	40 10
15	12 $2\frac{1}{4}$	20 $3\frac{3}{4}$	8 9	71	57 $8\frac{1}{4}$	96 $1\frac{3}{4}$	41 5
16	13 0	21 8	9 4	72	58 6	97 6	42 0
17	13 $9\frac{3}{4}$	23 $0\frac{1}{4}$	9 11	73	59 $3\frac{3}{4}$	98 $10\frac{1}{4}$	42 7
18	14 $7\frac{1}{2}$	24 $4\frac{1}{2}$	10 6	74	60 $1\frac{1}{2}$	100 $2\frac{3}{4}$	43 2
19	15 $5\frac{1}{4}$	25 $8\frac{3}{4}$	11 1	75	60 $11\frac{1}{4}$	101 $6\frac{3}{4}$	43 9
20	16 3	27 1	11 8	76	61 9	102 11	44 4
21	17 $0\frac{3}{4}$	28 $5\frac{1}{4}$	12 3	77	62 $6\frac{3}{4}$	104 $3\frac{1}{4}$	44 11
22	17 $10\frac{1}{2}$	29 $9\frac{1}{2}$	12 10	78	63 $4\frac{1}{2}$	105 $7\frac{1}{2}$	45 6
23	18 $8\frac{1}{4}$	31 $1\frac{3}{4}$	13 5	79	64 $2\frac{1}{4}$	106 $11\frac{3}{4}$	46 1
24	19 6	32 6	14 0	80	65 0	108 4	46 8
25	20 $3\frac{3}{4}$	33 $10\frac{1}{4}$	14 7	81	65 $9\frac{3}{4}$	109 $8\frac{1}{4}$	47 3
26	21 $1\frac{1}{2}$	35 $2\frac{1}{2}$	15 2	82	66 $7\frac{1}{2}$	111 $0\frac{1}{2}$	47 10
27	21 $11\frac{1}{4}$	36 $6\frac{3}{4}$	15 9	83	67 $5\frac{1}{4}$	112 $4\frac{3}{4}$	48 5
28	22 9	37 11	16 4	84	68 3	113 9	49 0
29	23 $6\frac{3}{4}$	39 $3\frac{1}{4}$	16 11	85	69 $0\frac{3}{4}$	115 $1\frac{1}{2}$	49 7
30	24 $4\frac{1}{2}$	40 $7\frac{1}{2}$	17 6	86	69 $10\frac{1}{2}$	116 $5\frac{1}{2}$	50 2
31	25 $2\frac{1}{4}$	41 $11\frac{3}{4}$	18 1	87	70 $8\frac{1}{4}$	117 $9\frac{3}{4}$	50 9
32	26 0	43 4	18 8	88	71 6	119 2	51 4
33	26 $9\frac{3}{4}$	44 $8\frac{1}{4}$	19 3	89	72 $3\frac{3}{4}$	120 $6\frac{1}{4}$	51 11
34	27 $7\frac{1}{2}$	46 $0\frac{1}{2}$	19 10	90	73 $1\frac{1}{2}$	121 $10\frac{1}{2}$	52 6
35	28 $5\frac{1}{4}$	47 $4\frac{3}{4}$	20 5	91	73 $11\frac{1}{4}$	123 $2\frac{3}{4}$	53 1
36	29 3	48 9	21 0	92	74 9	124 7	53 8
37	30 $0\frac{3}{4}$	50 $1\frac{1}{4}$	21 7	93	75 $6\frac{3}{4}$	125 $11\frac{1}{2}$	54 3
38	30 $10\frac{1}{2}$	51 $5\frac{3}{4}$	22 2	94	76 $4\frac{1}{2}$	127 $3\frac{3}{4}$	54 10
39	31 $8\frac{1}{4}$	52 $9\frac{1}{4}$	22 9	95	77 $2\frac{1}{4}$	128 $7\frac{1}{4}$	55 5
40	32 6	54 2	23 4	96	78 0	130 0	56 0
41	33 $3\frac{3}{4}$	55 $6\frac{1}{2}$	23 11	97	78 $9\frac{3}{4}$	131 $4\frac{1}{2}$	56 7
42	34 $1\frac{1}{2}$	56 $10\frac{1}{2}$	24 6	98	79 $7\frac{1}{2}$	132 $8\frac{1}{2}$	57 2
43	34 $11\frac{1}{4}$	58 $2\frac{3}{4}$	25 1	99	80 $5\frac{1}{4}$	134 $0\frac{3}{4}$	57 9
44	35 9	59 7	25 8	100	81 3	135 5	58 4
45	36 $6\frac{3}{4}$	60 $11\frac{1}{4}$	26 3	200	162 6	270 10	116 8
46	37 $4\frac{1}{2}$	62 $3\frac{1}{2}$	26 10	300	243 9	406 3	175 0
47	38 $2\frac{1}{4}$	63 $7\frac{3}{4}$	27 5	400	325 0	541 8	233 4
48	39 0	65 0	28 0	500	406 3	677 1	291 8
49	39 $9\frac{3}{4}$	66 $4\frac{1}{2}$	28 7	600	487 6	812 6	350 0
50	40 $7\frac{1}{2}$	67 $8\frac{1}{2}$	29 2	700	568 9	947 11	408 4
51	41 $5\frac{1}{4}$	69 $0\frac{3}{4}$	29 9	800	650 0	1083 4	466 8
52	42 3	70 5	30 4	900	731 3	1218 9	525 0
53	43 $0\frac{3}{4}$	71 $9\frac{1}{4}$	30 11	1000	812 6	1354 2	583 4
54	43 $10\frac{1}{2}$	73 $1\frac{1}{2}$	31 6	2000	1625 0	2708 4	1166 8
55	44 $8\frac{1}{4}$	74 $5\frac{3}{4}$	32 1	3000	2437 6	4062 6	1750 0
56	45 6	75 10	32 8	4000	3250 0	5416 8	2333 4

Run. Feet.	Inches. 7 × 1¼	Inches. 7 × 1½	Inches. 7 × 1¾	Run. Feet.	Inches. 7 × 1¼	Inches. 7 × 1½	Inches. 7 × 1¾
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	0 8¾	0 10½	1 0¼	57	41 6¾	49 10½	58 2¼
2	1 5½	1 9	2 0½	58	42 3½	50 9	59 2½
3	2 2¼	2 7½	3 0¾	59	43 0¼	51 7½	60 2¾
4	2 11	3 6	4 1	60	43 9	52 6	61 3
5	3 7¾	4 4½	5 1¼	61	44 5¾	53 4½	62 3¼
6	4 4½	5 3	6 1½	62	45 2½	54 3	63 3½
7	5 1¼	6 1½	7 1¾	63	45 11¼	55 1½	64 3¾
8	5 10	7 0	8 2	64	46 8	56 0	65 4
9	6 6¾	7 10½	9 2¼	65	47 4¾	56 10½	66 4¼
10	7 3½	8 9	10 2½	66	48 1½	57 9	67 4½
11	8 0¼	9 7½	11 2¾	67	48 10¼	58 7½	68 4¾
12	8 9	10 6	12 3	68	49 7	59 6	69 5
13	9 5¾	11 4½	13 3¼	69	50 3¾	60 4½	70 5¼
14	10 2½	12 3	14 3½	70	51 0½	61 3	71 5½
15	10 11¼	13 1½	15 3¾	71	51 9¼	62 1½	72 5¾
16	11 8	14 0	16 4	72	52 6	63 0	73 6
17	12 4¾	14 10½	17 4¼	73	53 2¾	63 10½	74 6¼
18	13 1½	15 9	18 4½	74	53 11½	64 9	75 6½
19	13 10¼	16 7½	19 4¾	75	54 8¼	65 7½	76 6¾
20	14 7	17 6	20 5	76	55 5	66 6	77 7
21	15 3¾	18 4½	21 5¼	77	56 1¾	67 4½	78 7¼
22	16 0½	19 3	22 5½	78	56 10½	68 3	79 7½
23	16 9¼	20 1½	23 5¾	79	57 7¼	69 1½	80 7¾
24	17 6	21 0	24 6	80	58 4	70 0	81 8
25	18 2¾	21 10½	25 6¼	81	59 0¾	70 10½	82 8¼
26	18 11½	22 9	26 6½	82	59 9½	71 9	83 8½
27	19 8¼	23 7½	27 6¾	83	60 6¼	72 7½	84 8¾
28	20 5	24 6	28 7	84	61 3	73 6	85 9
29	21 1¾	25 4½	29 7¼	85	61 11¾	74 4½	86 9¼
30	21 10½	26 3	30 7½	86	62 8½	75 3	87 9½
31	22 7¼	27 1½	31 7¾	87	63 5¼	76 1½	88 9¾
32	23 4	28 0	32 8	88	64 2	77 0	89 10
33	24 0¾	28 10½	33 8¼	89	64 10¾	77 10½	90 10¼
34	24 9½	29 9	34 8½	90	65 7½	78 9	91 10½
35	25 6¼	30 7½	35 8¾	91	66 4¼	79 7½	92 10¾
36	26 3	31 6	36 9	92	67 1	80 6	93 11
37	26 11¾	32 4½	37 9¼	93	67 9¾	81 4½	94 11¼
38	27 8½	33 3	38 9½	94	68 6½	82 3	95 11½
39	28 5¼	34 1½	39 9¾	95	69 3¼	83 1½	96 11¾
40	29 2	35 0	40 10	96	70 0	84 0	98 0
41	29 10¾	35 10½	41 10¼	97	70 8¾	84 10½	99 0¼
42	30 7½	36 9	42 10½	98	71 5½	85 9	100 0½
43	31 4¼	37 7½	43 10¾	99	72 2¼	86 7½	101 0¾
44	32 1	38 6	44 11	100	72 11	87 6	102 1
45	32 9¾	39 4½	45 11¼	200	145 10	175 0	204 2
46	33 6½	40 3	46 11½	300	218 9	262 6	306 3
47	34 3¼	41 1½	47 11¾	400	291 8	350 0	408 4
48	35 0	42 0	49 0	500	364 7	437 6	510 5
49	35 8¾	42 10½	50 0¼	600	437 6	525 0	612 6
50	36 5½	43 9	51 0½	700	510 5	612 6	714 7
51	37 2¼	44 7½	52 0¾	800	583 4	700 0	816 8
52	37 11	45 6	53 1	900	656 3	787 6	918 9
53	38 7¾	46 4½	54 1¼	1000	729 2	875 0	1020 10
54	39 4½	47 3	55 1½	2000	1458 4	1750 0	2041 8
55	40 1¼	48 1½	56 1¾	3000	2187 6	2625 0	3062 6
56	40 10	49 0	57 2	4000	2916 8	3500 0	4083 4

Run. Feet.	Inches. 7 × 2	Inches. 7 × 2¼	Inches. 7 × 2½	Run. Feet.	Inches. 7 × 2	Inches. 7 × 2¼	Inches. 7 × 2½
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 2	1 3¾	1 5½	57	66 6	74 9¾	83 1½
2	2 4	2 7½	2 11	58	67 8	76 1½	84 7
3	3 6	3 11¼	4 4½	59	68 10	77 5¼	86 0½
4	4 8	5 3	5 10	60	70 0	78 9	87 6
5	5 10	6 6¾	7 3½	61	71 2	80 0¾	88 11½
6	7 0	7 10½	8 9	62	72 4	81 4½	90 5
7	8 2	9 2¼	10 2½	63	73 6	82 8¼	91 10½
8	9 4	10 6	11 8	64	74 8	84 0	93 4
9	10 6	11 9¾	13 1½	65	75 10	85 3¾	94 9½
10	11 8	13 1½	14 7	66	77 0	86 7½	96 3
11	12 10	14 5¼	16 0½	67	78 2	87 11¼	97 8½
12	14 0	15 9	17 6	68	79 4	89 3	99 2
13	15 2	17 0¾	18 11½	69	80 6	90 6¾	100 7½
14	16 4	18 4½	20 5	70	81 8	91 10½	102 1
15	17 6	19 8¼	21 10½	71	82 10	93 2¼	103 6½
16	18 8	21 0	23 4	72	84 0	94 6	105 0
17	19 10	22 3¾	24 9½	73	85 2	95 9¾	106 5½
18	21 0	23 7½	26 3	74	86 4	97 1½	107 11
19	22 2	24 11¼	27 8½	75	87 6	98 5¼	109 4½
20	23 4	26 3	29 2	76	88 8	99 9	110 10
21	24 6	27 6¾	30 7½	77	89 10	101 0¾	112 3½
22	25 8	28 10½	32 1	78	91 0	102 4½	113 9
23	26 10	30 2¼	33 6½	79	92 2	103 8¼	115 2½
24	28 0	31 6	35 0	80	93 4	105 0	116 8
25	29 2	32 9¾	36 5½	81	94 6	106 3¾	118 1½
26	30 4	34 1½	37 11	82	95 8	107 7½	119 7
27	31 6	35 5¼	39 4½	83	96 10	108 11¼	121 0½
28	32 8	36 9	40 10	84	98 0	110 3	122 6
29	33 10	38 0¾	42 3½	85	99 2	111 6¾	123 11½
30	35 0	39 4½	43 9	86	100 4	112 10½	125 5
31	36 2	40 8¼	45 2½	87	101 6	114 2¼	126 10½
32	37 4	42 0	46 8	88	102 8	115 6	128 4
33	38 6	43 3¾	48 1½	89	103 10	116 9¾	129 9½
34	39 8	44 7½	49 7	90	105 0	118 1½	131 3
35	40 10	45 11¼	51 0½	91	106 2	119 5¼	132 8½
36	42 0	47 3	52 6	92	107 4	120 9	134 2
37	43 2	48 6¾	53 11½	93	108 6	122 0¾	135 7½
38	44 4	49 10½	55 5	94	109 8	123 4½	137 1
39	45 6	51 2¼	56 10½	95	110 10	124 8¼	138 6½
40	46 8	52 6	58 4	96	112 0	126 0	140 0
41	47 10	53 9¾	59 9½	97	113 2	127 3¾	141 5½
42	49 0	55 1½	61 3	98	114 4	128 7½	142 11
43	50 2	56 5¼	62 8½	99	115 6	129 11¼	144 4½
44	51 4	57 9	64 2	100	116 8	131 3	145 10
45	52 6	59 0¾	65 7½	200	233 4	262 6	291 8
46	53 8	60 4½	67 1	300	350 0	393 9	437 6
47	54 10	61 8¼	68 6½	400	466 8	525 0	583 4
48	56 0	63 0	70 0	500	583 4	656 3	729 2
49	57 2	64 3¾	71 5½	600	700 0	787 6	875 0
50	58 4	65 7½	72 11	700	816 8	918 9	1020 10
51	59 6	66 11¼	74 4½	800	933 4	1050 0	1166 8
52	60 8	68 3	75 10	900	1050 0	1181 3	1312 6
53	61 10	69 6¾	77 3½	1000	1166 8	1312 6	1458 4
54	63 0	70 10½	78 9	2000	2333 4	2625 0	2916 8
55	64 2	72 2¼	80 2½	3000	3500 0	3937 6	4375 0
56	65 4	73 6	81 8	4000	4666 8	5250 0	5833 4

Run. Feet.	Inches. 7 × 2¾	Inches. 7 × 3	Inches. 8 × 1	Run. Feet.	Inches. 7 × 2¾	Inches. 7 × 3	Inches. 8 × 1
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 7¼	1 9	0 8	57	91 5¼	99 9	38 0
2	3 2½	3 6	1 4	58	93 0½	101 6	38 8
3	4 9¾	5 3	2 0	59	94 7¾	103 3	39 4
4	6 5	7 0	2 8	60	96 3	105 0	40 0
5	8 0¼	8 9	3 4	61	97 10¼	106 9	40 8
6	9 7½	10 6	4 0	62	99 5½	108 6	41 4
7	11 2¾	12 3	4 8	63	101 0¾	110 3	42 0
8	12 10	14 0	5 4	64	102 8	112 0	42 8
9	14 5¼	15 9	6 0	65	104 3¼	113 9	43 4
10	16 0½	17 6	6 8	66	105 10½	115 6	44 0
11	17 7¾	19 3	7 4	67	107 5¾	117 3	44 8
12	19 3	21 0	8 0	68	109 1	119 0	45 4
13	20 10¼	22 9	8 8	69	110 8¼	120 9	46 0
14	22 5½	24 6	9 4	70	112 3½	122 6	46 8
15	24 0¾	26 3	10 0	71	113 10¾	124 3	47 4
16	25 8	28 0	10 8	72	115 6	126 0	48 0
17	27 3¼	29 9	11 4	73	117 1¼	127 9	48 8
18	28 10½	31 6	12 0	74	118 8½	129 6	49 4
19	30 5¾	33 3	12 8	75	120 3¾	131 3	50 0
20	32 1	35 0	13 4	76	121 11	133 0	50 8
21	33 8¼	36 9	14 0	77	123 6¼	134 9	51 4
22	35 3½	38 6	14 8	78	125 1½	136 6	52 0
23	36 10¾	40 3	15 4	79	126 8¾	138 3	52 8
24	38 6	42 0	16 0	80	128 4	140 0	53 4
25	40 1¼	43 9	16 8	81	129 11¼	141 9	54 0
26	41 8½	45 6	17 4	82	131 6½	143 6	54 8
27	43 3¾	47 3	18 0	83	133 1¾	145 3	55 4
28	44 11	49 0	18 8	84	134 9	147 0	56 0
29	46 6¼	50 9	19 4	85	136 4¼	148 9	56 8
30	48 1½	52 6	20 0	86	137 11½	150 6	57 4
31	49 8¾	54 3	20 8	87	139 6¾	152 3	58 0
32	51 4	56 0	21 4	88	141 2	154 0	58 8
33	52 11¼	57 9	22 0	89	142 9¼	155 9	59 4
34	54 6½	59 6	22 8	90	144 4½	157 6	60 0
35	56 1¾	61 3	23 4	91	145 11¾	159 3	60 8
36	57 9	63 0	24 0	92	147 7	161 0	61 4
37	59 4¼	64 9	24 8	93	149 2¼	162 9	62 0
38	60 11½	66 6	25 4	94	150 9½	164 6	62 8
39	62 6¾	68 3	26 0	95	152 4¾	166 3	63 4
40	64 2	70 0	26 8	96	154 0	168 0	64 0
41	65 9¼	71 9	27 4	97	155 7¼	169 9	64 8
42	67 4½	73 6	28 0	98	157 2½	171 6	65 4
43	68 11¾	75 3	28 8	99	158 9¾	173 3	66 0
44	70 7	77 0	29 4	100	160 5	175 0	66 8
45	72 2¼	78 9	30 0	200	320 10	350 0	133 4
46	73 9½	80 6	30 8	300	481 3	525 0	200 0
47	75 4¾	82 3	31 4	400	641 8	700 0	266 8
48	77 0	84 0	32 0	500	802 1	875 0	333 4
49	78 7¼	85 9	32 8	600	962 6	1050 0	400 0
50	80 2½	87 6	33 4	700	1122 11	1225 0	466 8
51	81 9¾	89 3	34 0	800	1283 4	1400 0	533 4
52	83 5	91 0	34 8	900	1443 9	1575 0	600 0
53	85 0¼	92 9	35 4	1000	1604 2	1750 0	666 8
54	86 7½	94 6	36 0	2000	3208 4	3500 0	1333 4
55	88 2¾	96 3	36 8	3000	4812 6	5250 0	2000 0
56	89 10	98 0	37 4	4000	6416 8	7000 0	2666 8

Run. Feet.	Inches. 8 × 1¼	Inches. 8 × 1½	Inches. 8 × 1¾	Run. Feet.	Inches. 8 × 1¼	Inches. 8 × 1½	Inches. 8 × 1¾
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	0 10	1 0	1 2	57	47 6	57 0	66 6
2	1 8	2 0	2 4	58	48 4	58 0	67 8
3	2 6	3 0	3 6	59	49 2	59 0	68 10
4	3 4	4 0	4 8	60	50 0	60 0	70 0
5	4 2	5 0	5 10	61	50 10	61 0	71 2
6	5 0	6 0	7 0	62	51 8	62 0	72 4
7	5 10	7 0	8 2	63	52 6	63 0	73 6
8	6 8	8 0	9 4	64	53 4	64 0	74 8
9	7 6	9 0	10 6	65	54 2	65 0	75 10
10	8 4	10 0	11 8	66	55 0	66 0	77 0
11	9 2	11 0	12 10	67	55 10	67 0	78 2
12	10 0	12 0	14 0	68	56 8	68 0	79 4
13	10 10	13 0	15 2	69	57 6	69 0	80 6
14	11 8	14 0	16 4	70	58 4	70 0	81 8
15	12 6	15 0	17 6	71	59 2	71 0	82 10
16	13 4	16 0	18 8	72	60 0	72 0	84 0
17	14 2	17 0	19 10	73	60 10	73 0	85 2
18	15 0	18 0	21 0	74	61 8	74 0	86 4
19	15 10	19 0	22 2	75	62 6	75 0	87 6
20	16 8	20 0	23 4	76	63 4	76 0	88 8
21	17 6	21 0	24 6	77	64 2	77 0	89 10
22	18 4	22 0	25 8	78	65 0	78 0	91 0
23	19 2	23 0	26 10	79	65 10	79 0	92 2
24	20 0	24 0	28 0	80	66 8	80 0	93 4
25	20 10	25 0	29 2	81	67 6	81 0	94 6
26	21 8	26 0	30 4	82	68 4	82 0	95 8
27	22 6	27 0	31 6	83	69 2	83 0	96 10
28	23 4	28 0	32 8	84	70 0	84 0	98 0
29	24 2	29 0	33 10	85	70 10	85 0	99 2
30	25 0	30 0	35 0	86	71 8	86 0	100 4
31	25 10	31 0	36 2	87	72 6	87 0	101 6
32	26 8	32 0	37 4	88	73 4	88 0	102 8
33	27 6	33 0	38 6	89	74 2	89 0	103 10
34	28 4	34 0	39 8	90	75 0	90 0	105 0
35	29 2	35 0	40 10	91	75 10	91 0	106 2
36	30 0	36 0	42 0	92	76 8	92 0	107 4
37	30 10	37 0	43 2	93	77 6	93 0	108 6
38	31 8	38 0	44 4	94	78 4	94 0	109 8
39	32 6	39 0	45 6	95	79 2	95 0	110 10
40	33 4	40 0	46 8	96	80 0	96 0	112 0
41	34 2	41 0	47 10	97	80 10	97 0	113 2
42	35 0	42 0	49 0	98	81 8	98 0	114 4
43	35 10	43 0	50 2	99	82 6	99 0	115 6
44	36 8	44 0	51 4	100	83 4	100 0	116 8
45	37 6	45 0	52 6	200	166 8	200 0	233 4
46	38 4	46 0	53 8	300	250 0	300 0	350 0
47	39 2	47 0	54 10	400	333 4	400 0	466 8
48	40 0	48 0	56 0	500	416 8	500 0	583 4
49	40 10	49 0	57 2	600	500 0	600 0	700 0
50	41 8	50 0	58 4	700	583 4	700 0	816 8
51	42 6	51 0	59 6	800	666 8	800 0	933 4
52	43 4	52 0	60 8	900	750 0	900 0	1050 0
53	44 2	53 0	61 10	1000	833 4	1000 0	1166 8
54	45 0	54 0	63 0	2000	1666 8	2000 0	2333 4
55	45 10	55 0	64 2	3000	2500 0	3000 0	3500 0
56	46 8	56 0	65 4	4000	3333 4	4000 0	4666 8

Run. Feet.	Inches. 8 × 2	Inches. 8 × 2¼	Inches. 8 × 2½	Run. Feet.	Inches. 8 × 2	Inches. 8 × 2¼	Inches. 8 × 2½
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 4	1 6	1 8	57	76 0	85 6	95 0
2	2 8	3 0	3 4	58	77 4	87 0	96 8
3	4 0	4 6	5 0	59	78 8	88 6	98 4
4	5 4	6 0	6 8	60	80 0	90 0	100 0
5	6 8	7 6	8 4	61	81 4	91 6	101 8
6	8 0	9 0	10 0	62	82 8	93 0	103 4
7	9 4	10 6	11 8	63	84 0	94 6	105 0
8	10 8	12 0	13 4	64	85 4	96 0	106 8
9	12 0	13 6	15 0	65	86 8	97 6	108 4
10	13 4	15 0	16 8	66	88 0	99 0	110 0
11	14 8	16 6	18 4	67	89 4	100 6	111 8
12	16 0	18 0	20 0	68	90 8	102 0	113 4
13	17 4	19 6	21 8	69	92 0	103 6	115 0
14	18 8	21 0	23 4	70	93 4	105 0	116 8
15	20 0	22 6	25 0	71	94 8	106 6	118 4
16	21 4	24 0	26 8	72	96 0	108 0	120 0
17	22 8	25 6	28 4	73	97 4	109 6	121 8
18	24 0	27 0	30 0	74	98 8	111 0	123 4
19	25 4	28 6	31 8	75	100 0	112 6	125 0
20	26 8	30 0	33 4	76	101 4	114 0	126 8
21	28 0	31 6	35 0	77	102 8	115 6	128 4
22	29 4	33 0	36 8	78	104 0	117 0	130 0
23	30 8	34 6	38 4	79	105 4	118 6	131 8
24	32 0	36 0	40 0	80	106 8	120 0	133 4
25	33 4	37 6	41 8	81	108 0	121 6	135 0
26	34 8	39 0	43 4	82	109 4	123 0	136 8
27	36 0	40 6	45 0	83	110 8	124 6	138 4
28	37 4	42 0	46 8	84	112 0	126 0	140 0
29	38 8	43 6	48 4	85	113 4	127 6	141 8
30	40 0	45 0	50 0	86	114 8	129 0	143 4
31	41 4	46 6	51 8	87	116 0	130 6	145 0
32	42 8	48 0	53 4	88	117 4	132 0	146 8
33	44 0	49 6	55 0	89	118 8	133 6	148 4
34	45 4	51 0	56 8	90	120 0	135 0	150 0
35	46 8	52 6	58 4	91	121 4	136 6	151 8
36	48 0	54 0	60 0	92	122 8	138 0	153 4
37	49 4	55 6	61 8	93	124 0	139 6	155 0
38	50 8	57 0	63 4	94	125 4	141 0	156 8
39	52 0	58 6	65 0	95	126 8	142 6	158 4
40	53 4	60 0	66 8	96	128 0	144 0	160 0
41	54 8	61 6	68 4	97	129 4	145 6	161 8
42	56 0	63 0	70 0	98	130 8	147 0	163 4
43	57 4	64 6	71 8	99	132 0	148 6	165 0
44	58 8	66 0	73 4	100	133 4	150 0	166 8
45	60 0	67 6	75 0	200	266 8	300 0	333 4
46	61 4	69 0	76 8	300	400 0	450 0	500 0
47	62 8	70 6	78 4	400	533 4	600 0	666 8
48	64 0	72 0	80 0	500	666 8	750 0	833 4
49	65 4	73 6	81 8	600	800 0	900 0	1000 0
50	66 8	75 0	83 4	700	933 4	1050 0	1166 8
51	68 0	76 6	85 0	800	1066 8	1200 0	1333 4
52	69 4	78 0	86 8	900	1200 0	1350 0	1500 0
53	70 8	79 6	88 4	1000	1333 4	1500 0	1666 8
54	72 0	81 0	90 0	2000	2666 8	3000 0	3333 4
55	73 4	82 6	91 8	3000	4000 0	4500 0	5000 0
56	74 8	84 0	93 4	4000	5333 4	6000 0	6666 8

Run. Feet.	Inches. 8 × 2¾	Inches. 8 × 3	Inches. 9 × 1	Run. Feet.	Inches. 8 × 2¾	Inches. 8 × 3	Inches. 9 × 1
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 10	2 0	0 9	57	104 6	114 0	42 9
2	3 8	4 0	1 6	58	106 4	116 0	43 6
3	5 6	6 0	2 3	59	108 2	118 0	44 3
4	7 4	8 0	3 0	60	110 0	120 0	45 0
5	9 2	10 0	3 9	61	111 10	122 0	45 9
6	11 0	12 0	4 6	62	113 8	124 0	46 6
7	12 10	14 0	5 3	63	115 6	126 0	47 3
8	14 8	16 0	6 0	64	117 4	128 0	48 0
9	16 6	18 0	6 9	65	119 2	130 0	48 9
10	18 4	20 0	7 6	66	121 0	132 0	49 6
11	20 2	22 0	8 3	67	122 10	134 0	50 3
12	22 0	24 0	9 0	68	124 8	136 0	51 0
13	23 10	26 0	9 9	69	126 6	138 0	51 9
14	25 8	28 0	10 6	70	128 4	140 0	52 6
15	27 6	30 0	11 3	71	130 2	142 0	53 3
16	29 4	32 0	12 0	72	132 0	144 0	54 0
17	31 2	34 0	12 9	73	133 10	146 0	54 9
18	33 0	36 0	13 6	74	135 8	148 0	55 6
19	34 10	38 0	14 3	75	137 6	150 0	56 3
20	36 8	40 0	15 0	76	139 4	152 0	57 0
21	38 6	42 0	15 9	77	141 2	154 0	57 9
22	40 4	44 0	16 6	78	143 0	156 0	58 6
23	42 2	46 0	17 3	79	144 10	158 0	59 3
24	44 0	48 0	18 0	80	146 8	160 0	60 0
25	45 10	50 0	18 9	81	148 6	162 0	60 9
26	47 8	52 0	19 6	82	150 4	164 0	61 6
27	49 6	54 0	20 3	83	152 2	166 0	62 3
28	51 4	56 0	21 0	84	154 0	168 0	63 0
29	53 2	58 0	21 9	85	155 10	170 0	63 9
30	55 0	60 0	22 6	86	157 8	172 0	64 6
31	56 10	62 0	23 3	87	159 6	174 0	65 3
32	58 8	64 0	24 0	88	161 4	176 0	66 0
33	60 6	66 0	24 9	89	163 2	178 0	66 9
34	62 4	68 0	25 6	90	165 0	180 0	67 6
35	64 2	70 0	26 3	91	166 10	182 0	68 3
36	66 0	72 0	27 0	92	168 8	184 0	69 0
37	67 10	74 0	27 9	93	170 6	186 0	69 9
38	69 8	76 0	28 6	94	172 4	188 0	70 6
39	71 6	78 0	29 3	95	174 2	190 0	71 3
40	73 4	80 0	30 0	96	176 0	192 0	72 0
41	75 2	82 0	30 9	97	177 10	194 0	72 9
42	77 0	84 0	31 6	98	179 8	196 0	73 6
43	78 10	86 0	32 3	99	181 6	198 0	74 3
44	80 8	88 0	33 0	100	183 4	200 0	75 0
45	82 6	90 0	33 9	200	366 8	400 0	150 0
46	84 4	92 0	34 6	300	550 0	600 0	225 0
47	86 2	94 0	35 3	400	733 4	800 0	300 0
48	88 0	96 0	36 0	500	916 8	1000 0	375 0
49	89 10	98 0	36 9	600	1100 0	1200 0	450 0
50	91 8	100 0	37 6	700	1283 4	1400 0	525 0
51	93 6	102 0	38 3	800	1466 8	1600 0	600 0
52	95 4	104 0	39 0	900	1650 0	1800 0	675 0
53	97 2	106 0	39 9	1000	1833 4	2000 0	750 0
54	99 0	108 0	40 6	2000	3666 8	4000 0	1500 0
55	100 10	110 0	41 3	3000	5500 0	6000 0	2250 0
56	102 8	112 0	42 0	4000	7333 4	8000 0	3000 0

Run. Feet.	Inches. 9 × 1¼	Inches. 9 × 1½	Inches. 9 × 1¾	Run. Feet.	Inches. 9 × 1¼	Inches. 9 × 1½	Inches. 9 × 1¾
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	0 11¼	1 1½	1 3¾	57	53 5¼	64 1½	74 9¾
2	1 10½	2 3	2 7½	58	54 4½	65 3	76 1½
3	2 9¾	3 4½	3 11¼	59	55 3¾	66 4½	77 5¼
4	3 9	4 6	5 3	60	56 3	67 6	78 9
5	4 8¼	5 7½	6 6¾	61	57 2¼	68 7½	80 0¾
6	5 7½	6 9	7 10½	62	58 1½	69 9	81 4½
7	6 6¾	7 10½	9 2¼	63	59 0¾	70 10½	82 8¼
8	7 6	9 0	10 6	64	60 0	72 0	84 0
9	8 5¼	10 1½	11 9¾	65	60 11¼	73 1½	85 3¾
10	9 4½	11 3	13 1½	66	61 10½	74 3	86 7½
11	10 3¾	12 4½	14 5¼	67	62 9¾	75 4½	87 11¼
12	11 3	13 6	15 9	68	63 9	76 6	89 3
13	12 2¼	14 7½	17 0¾	69	64 8¼	77 7½	90 6¾
14	13 1½	15 9	18 4½	70	65 7½	78 9	91 10½
15	14 0¾	16 10½	19 8¼	71	66 6¾	79 10½	93 2¼
16	15 0	18 0	21 0	72	67 6	81 0	94 6
17	15 11¼	19 1½	22 3¾	73	68 5¼	82 1½	95 9¾
18	16 10½	20 3	23 7½	74	69 4½	83 3	97 1½
19	17 9¾	21 4½	24 11¼	75	70 3¾	84 4½	98 5¼
20	18 9	22 6	26 3	76	71 3	85 6	99 9
21	19 8¼	23 7½	27 6¾	77	72 2¼	86 7½	101 0¾
22	20 7½	24 9	28 10½	78	73 1½	87 9	102 4½
23	21 6¾	25 10½	30 2¼	79	74 0¾	88 10½	103 8¼
24	22 6	27 0	31 6	80	75 0	90 0	105 0
25	23 5¼	28 1½	32 9¾	81	75 11¼	91 1½	106 3¾
26	24 4½	29 3	34 1½	82	76 10½	92 3	107 7½
27	25 3¾	30 4½	35 5¼	83	77 9¾	93 4½	108 11¼
28	26 3	31 6	36 9	84	78 9	94 6	110 3
29	27 2¼	32 7½	38 0¾	85	79 8¼	95 7½	111 6¾
30	28 1½	33 9	39 4½	86	80 7½	96 9	112 10½
31	29 0¾	34 10½	40 8¼	87	81 6¾	97 10½	114 2¼
32	30 0	36 0	42 0	88	82 6	99 0	115 6
33	30 11¼	37 1½	43 3¾	89	83 5¼	100 1½	116 9¾
34	31 10½	38 3	44 7½	90	84 4½	101 3	118 1½
35	32 9¾	39 4½	45 11¼	91	85 3¾	102 4½	119 5¼
36	33 9	40 6	47 3	92	86 3	103 6	120 9
37	34 8¼	41 7½	48 6¾	93	87 2¼	104 7½	122 0¾
38	35 7½	42 9	49 10½	94	88 1½	105 9	123 4½
39	36 6¾	43 10½	51 2¼	95	89 0¾	106 10½	124 8¼
40	37 6	45 0	52 6	96	90 0	108 0	126 0
41	38 5¼	46 1½	53 9¾	97	90 11¼	109 1½	127 3¾
42	39 4½	47 3	55 1½	98	91 10½	110 3	128 7½
43	40 3¾	48 4½	56 5¼	99	92 9¾	111 4½	129 11¼
44	41 3	49 6	57 9	100	93 9	112 6	131 3
45	42 2¼	50 7½	59 0¾	200	187 6	225 0	262 6
46	43 1½	51 9	60 4½	300	281 3	337 6	393 9
47	44 0¾	52 10½	61 8¼	400	375 0	450 0	525 0
48	45 0	54 0	63 0	500	468 9	562 6	656 3
49	45 11¼	55 1½	64 3¾	600	562 6	675 0	787 6
50	46 10½	56 3	65 7½	700	656 3	787 6	918 9
51	47 9¾	57 4½	66 11¼	800	750 0	900 0	1050 0
52	48 9	58 6	68 3	900	843 9	1012 6	1181 3
53	49 8¼	59 7½	69 6¾	1000	937 6	1125 0	1312 6
54	50 7½	60 9	70 10½	2000	1875 0	2250 0	2625 0
55	51 6¾	61 10½	72 2¼	3000	2812 6	3375 0	3937 6
56	52 6	63 0	73 6	4000	3750 0	4500 0	5250 0

Run. Feet.	Inches. 9 × 2	Inches. 9 × 2¼	Inches. 9 × 2½	Run. Feet.	Inches. 9 × 2	Inches. 9 × 2¼	Inches. 9 × 2½
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 6	1 8¼	1 10½	57	85 6	96 2¼	106 10½
2	3 0	3 4½	3 9	58	87 0	97 10½	108 9
3	4 6	5 0¾	5 7½	59	88 6	99 6¾	110 7½
4	6 0	6 9	7 6	60	90 0	101 3	112 6
5	7 6	8 5¼	9 4½	61	91 6	102 11¼	114 4½
6	9 0	10 1½	11 3	62	93 0	104 7½	116 3
7	10 6	11 9¾	13 1½	63	94 6	106 3¾	118 1½
8	12 0	13 6	15 0	64	96 0	108 0	120 0
9	13 6	15 2¼	16 10½	65	97 6	109 8¼	121 10½
10	15 0	16 10½	18 9	66	99 0	111 4½	123 9
11	16 6	18 6¾	20 7½	67	100 6	113 0¾	125 7½
12	18 0	20 3	22 6	68	102 0	114 9	127 6
13	19 6	21 11¼	24 4½	69	103 6	116 5¼	129 4½
14	21 0	23 7½	26 3	70	105 0	118 1½	131 3
15	22 6	25 3¾	28 1½	71	106 6	119 9¾	133 1½
16	24 0	27 0	30 0	72	108 0	121 6	135 0
17	25 6	28 8¼	31 10½	73	109 6	123 2¼	136 10½
18	27 0	30 4½	33 9	74	111 0	124 10½	138 9
19	28 6	32 0¾	35 7½	75	112 6	126 6¾	140 7½
20	30 0	33 9	37 6	76	114 0	128 3	142 6
21	31 6	35 5¼	39 4½	77	115 6	129 11¼	144 4½
22	33 0	37 1½	41 3	78	117 0	131 7½	146 3
23	34 6	38 9¾	43 1½	79	118 6	133 3¾	148 1½
24	36 0	40 6	45 0	80	120 0	135 0	150 0
25	37 6	42 2¼	46 10½	81	121 6	136 8¼	151 10½
26	39 0	43 10½	48 9	82	123 0	138 4½	153 9
27	40 6	45 6¾	50 7½	83	124 6	140 0¾	155 7½
28	42 0	47 3	52 6	84	126 0	141 9	157 6
29	43 6	48 11¼	54 4½	85	127 6	143 5¼	159 4½
30	45 0	50 7½	56 3	86	129 0	145 1½	161 3
31	46 6	52 3¾	58 1½	87	130 6	146 9¾	163 1½
32	48 0	54 0	60 0	88	132 0	148 6	165 0
33	49 6	55 8¼	61 10½	89	133 6	150 2¼	166 10½
34	51 0	57 4½	63 9	90	135 0	151 10½	168 9
35	52 6	59 0¾	65 7½	91	136 6	153 6¾	170 7½
36	54 0	60 9	67 6	92	138 0	155 3	172 6
37	55 6	62 5¼	69 4½	93	139 6	156 11¼	174 4½
38	57 0	64 1½	71 3	94	141 0	158 7½	176 3
39	58 6	65 9¾	73 1½	95	142 6	160 3¾	178 1½
40	60 0	67 6	75 0	96	144 0	162 0	180 0
41	61 6	69 2¼	76 10½	97	145 6	163 8¼	181 10½
42	63 0	70 10½	78 9	98	147 0	165 4½	183 9
43	64 6	72 6¾	80 7½	99	148 6	167 0¾	185 7½
44	66 0	74 3	82 6	100	150 0	168 9	187 6
45	67 6	75 11¼	84 4½	200	300 0	337 6	375 0
46	69 0	77 7½	86 3	300	450 0	506 3	562 6
47	70 6	79 3¾	88 1½	400	600 0	675 0	750 0
48	72 0	81 0	90 0	500	750 0	843 9	937 6
49	73 6	82 8¼	91 10½	600	900 0	1012 6	1125 0
50	75 0	84 4½	93 9	700	1050 0	1181 3	1312 6
51	76 6	86 0¾	95 7½	800	1200 0	1350 0	1500 0
52	78 0	87 9	97 6	900	1350 0	1518 9	1687 6
53	79 6	89 5¼	99 4½	1000	1500 0	1687 6	1875 0
54	81 0	91 1½	101 3	2000	3000 0	3375 0	3750 0
55	82 6	92 9¾	103 1½	3000	4500 0	5062 6	5625 0
56	84 0	94 6	105 0	4000	6000 0	6750 0	7500 0

Run. Feet.	Inches. 9 × 2¾	Inches. 9 × 3	Inches. 10 × 1	Run. Feet.	Inches. 9 × 2¾	Inches. 9 × 3	Inches. 10 × 1
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	2 0¾	2 3	0 10	57	117 6¾	128 3	47 6
2	4 1½	4 6	1 8	58	119 7½	130 6	48 4
3	6 2¼	6 9	2 6	59	121 8¼	132 9	49 2
4	8 3	9 0	3 4	60	123 9	135 0	50 0
5	10 3¾	11 3	4 2	61	125 9¾	137 3	50 10
6	12 4½	13 6	5 0	62	127 10½	139 6	51 8
7	14 5¼	15 9	5 10	63	129 11¼	141 9	52 6
8	16 6	18 0	6 8	64	132 0	144 0	53 4
9	18 6¾	20 3	7 6	65	134 0¾	146 3	54 2
10	20 7½	22 6	8 4	66	136 1½	148 6	55 0
11	22 8¼	24 9	9 2	67	138 2¼	150 9	55 10
12	24 9	27 0	10 0	68	140 3	153 0	56 8
13	26 9¾	29 3	10 10	69	142 3¾	155 3	57 6
14	28 10½	31 6	11 8	70	144 4½	157 6	58 4
15	30 11¼	33 9	12 6	71	146 5¼	159 9	59 2
16	33 0	36 0	13 4	72	148 6	162 0	60 0
17	35 0¾	38 3	14 2	73	150 6¾	164 3	60 10
18	37 1½	40 6	15 0	74	152 7½	166 6	61 8
19	39 2¼	42 9	15 10	75	154 8¼	168 9	62 6
20	41 3	45 0	16 8	76	156 9	171 0	63 4
21	43 3¾	47 3	17 6	77	158 9¾	173 3	64 2
22	45 4½	49 6	18 4	78	160 10½	175 6	65 0
23	47 5¼	51 9	19 2	79	162 11¼	177 9	65 10
24	49 6	54 0	20 0	80	165 0	180 0	66 8
25	51 6¾	56 3	20 10	81	167 0¾	182 3	67 6
26	53 7½	58 6	21 8	82	169 1½	184 6	68 4
27	55 8¼	60 9	22 6	83	171 2¼	186 9	69 2
28	57 9	63 0	23 4	84	173 3	189 0	70 0
29	59 9¾	65 3	24 2	85	175 3¾	191 3	70 10
30	61 10½	67 6	25 0	86	177 4½	193 6	71 8
31	63 11¼	69 9	25 10	87	179 5¼	195 9	72 6
32	66 0	72 0	26 8	88	181 6	198 0	73 4
33	68 0¾	74 3	27 6	89	183 6¾	200 3	74 2
34	70 1½	76 6	28 4	90	185 7½	202 6	75 0
35	72 2¼	78 9	29 2	91	187 8¼	204 9	75 10
36	74 3	81 0	30 0	92	189 9	207 0	76 8
37	76 3¾	83 3	30 10	93	191 9¾	209 3	77 6
38	78 4½	85 6	31 8	94	193 10½	211 6	78 4
39	80 5¼	87 9	32 6	95	195 11¼	213 9	79 2
40	82 6	90 0	33 4	96	198 0	216 0	80 0
41	84 6¾	92 3	34 2	97	200 0¾	218 3	80 10
42	86 7½	94 6	35 0	98	202 1½	220 6	81 8
43	88 8¼	96 9	35 10	99	204 2¼	222 9	82 6
44	90 9	99 0	36 8	100	206 3	225 0	83 4
45	92 9¾	101 3	37 6	200	412 6	450 0	166 8
46	94 10½	103 6	38 4	300	618 9	675 0	250 0
47	96 11¼	105 9	39 2	400	825 0	900 0	333 4
48	99 0	108 0	40 0	500	1031 3	1125 0	416 8
49	101 0¾	110 3	40 10	600	1237 6	1350 0	500 0
50	103 1½	112 6	41 8	700	1443 9	1575 0	583 4
51	105 2¼	114 9	42 6	800	1650 0	1800 0	666 8
52	107 3	117 0	43 4	900	1856 3	2025 0	750 0
53	109 3¾	119 3	44 2	1000	2062 6	2250 0	833 4
54	111 4½	121 6	45 0	2000	4125 0	4500 0	1666 8
55	113 5¼	123 9	45 10	3000	6187 6	6750 0	2500 0
56	115 6	126 0	46 8	4000	8250 0	9000 0	3333 4

Run. Feet.	Inches. 10 × 1¼	Inches. 10 × 1½	Inches. 10 × 1¾	Run. Feet.	Inches. 10 × 1¼	Inches. 10 × 1½	Inches. 10 × 1¾
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 0½	1 3	1 5½	57	59 4½	71 3	83 1½
2	2 1	2 6	2 11	58	60 5	72 6	84 7
3	3 1½	3 9	4 4½	59	61 5½	73 9	86 0½
4	4 2	5 0	5 10	60	62 6	75 0	87 6
5	5 2½	6 3	7 3½	61	63 6½	76 3	88 11½
6	6 3	7 6	8 9	62	64 7	77 6	90 5
7	7 3½	8 9	10 2½	63	65 7½	78 9	91 10½
8	8 4	10 0	11 8	64	66 8	80 0	93 4
9	9 4½	11 3	13 1½	65	67 8½	81 3	94 9½
10	10 5	12 6	14 7	66	68 9	82 6	96 3
11	11 5½	13 9	16 0½	67	69 9½	83 9	97 8½
12	12 6	15 0	17 6	68	70 10	85 0	99 2
13	13 6½	16 3	18 11½	69	71 10½	86 3	100 7½
14	14 7	17 6	20 5	70	72 11	87 6	102 1
15	15 7½	18 9	21 10½	71	73 11½	88 9	103 6½
16	16 8	20 0	23 4	72	75 0	90 0	105 0
17	17 8½	21 3	24 9½	73	76 0½	91 3	106 5½
18	18 9	22 6	26 3	74	77 1	92 6	107 11
19	19 9½	23 9	27 8½	75	78 1½	93 9	109 4½
20	20 10	25 0	29 2	76	79 2	95 0	110 10
21	21 10½	26 3	30 7½	77	80 2½	96 3	112 3½
22	22 11	27 6	32 1	78	81 3	97 6	113 9
23	23 11½	28 9	33 6½	79	82 3½	98 9	115 2½
24	25 0	30 0	35 0	80	83 4	100 0	116 8
25	26 0½	31 3	36 5½	81	84 4½	101 3	118 1½
26	27 1	32 6	37 11	82	85 5	102 6	119 7
27	28 1½	33 9	39 4½	83	86 5½	103 9	121 0½
28	29 2	35 0	40 10	84	87 6	105 0	122 6
29	30 2½	36 3	42 3½	85	88 6½	106 3	123 11½
30	31 3	37 6	43 9	86	89 7	107 6	125 5
31	32 3½	38 9	45 2½	87	90 7½	108 9	126 10½
32	33 4	40 0	46 8	88	91 8	110 0	128 4
33	34 4½	41 3	48 1½	89	92 8½	111 3	129 9½
34	35 5	42 6	49 7	90	93 9	112 6	131 3
35	36 5½	43 9	51 0½	91	94 9½	113 9	132 8½
36	37 6	45 0	52 6	92	95 10	115 0	134 2
37	38 6½	46 3	53 11½	93	96 10½	116 3	135 7½
38	39 7	47 6	55 5	94	97 11	117 6	137 1
39	40 7½	48 9	56 10½	95	98 11½	118 9	138 6½
40	41 8	50 0	58 4	96	100 0	120 0	140 0
41	42 8½	51 3	59 9½	97	101 0½	121 3	141 5½
42	43 9	52 6	61 3	98	102 1	122 6	142 11
43	44 9½	53 9	62 8½	99	103 1½	123 9	144 4½
44	45 10	55 0	64 2	100	104 2	125 0	145 10
45	46 10½	56 3	65 7½	200	208 4	250 0	291 8
46	47 11	57 6	67 1	300	312 6	375 0	437 6
47	48 11½	58 9	68 6½	400	416 8	500 0	583 4
48	50 0	60 0	70 0	500	520 10	625 0	729 2
49	51 0½	61 3	71 5½	600	625 0	750 0	875 0
50	52 1	62 6	72 11	700	729 2	875 0	1020 10
51	53 1½	63 9	74 4½	800	833 4	1000 0	1166 8
52	54 2	65 0	75 10	900	937 6	1125 0	1312 6
53	55 2½	66 3	77 3½	1000	1041 8	1250 0	1458 4
54	56 3	67 6	78 9	2000	2083 4	2500 0	2916 8
55	57 3½	68 9	80 2½	3000	3125 0	3750 0	4375 0
56	58 4	70 0	81 8	4000	4166 8	5000 0	5833 4

Run. Feet.	Inches. 10 × 2	Inches. 10 × 2¼	Inches. 10 × 2½	Run. Feet.	Inches. 10 × 2	Inches. 10 × 2¼	Inches. 10 × 2½
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 8	1 10½	2 1	57	95 0	106 10½	118 9
2	3 4	3 9	4 2	58	96 8	108 9	120 10
3	5 0	5 7½	6 3	59	98 4	110 7½	122 11
4	6 8	7 6	8 4	60	100 0	112 6	125 0
5	8 4	9 4½	10 5	61	101 8	114 4½	127 1
6	10 0	11 3	12 6	62	103 4	116 3	129 2
7	11 8	13 1½	14 7	63	105 0	118 1½	131 3
8	13 4	15 0	16 8	64	106 8	120 0	133 4
9	15 0	16 10½	18 9	65	108 4	121 10½	135 5
10	16 8	18 9	20 10	66	110 0	123 9	137 6
11	18 4	20 7½	22 11	67	111 8	125 7½	139 7
12	20 0	22 6	25 0	68	113 4	127 6	141 8
13	21 8	24 4½	27 1	69	115 0	129 4½	143 9
14	23 4	26 3	29 2	70	116 8	131 3	145 10
15	25 0	28 1½	31 3	71	118 4	133 1½	147 11
16	26 8	30 0	33 4	72	120 0	135 0	150 0
17	28 4	31 10½	35 5	73	121 8	136 10½	152 1
18	30 0	33 9	37 6	74	123 4	138 9	154 2
19	31 8	35 7½	39 7	75	125 0	140 7½	156 3
20	33 4	37 6	41 8	76	126 8	142 6	158 4
21	35 0	39 4½	43 9	77	128 4	144 4½	160 5
22	36 8	41 3	45 10	78	130 0	146 3	162 6
23	38 4	43 1½	47 11	79	131 8	148 1½	164 7
24	40 0	45 0	50 0	80	133 4	150 0	166 8
25	41 8	46 10½	52 1	81	135 0	151 10½	168 9
26	43 4	48 9	54 2	82	136 8	153 9	170 10
27	45 0	50 7½	56 3	83	138 4	155 7½	172 11
28	46 8	52 6	58 4	84	140 0	157 6	175 0
29	48 4	54 4½	60 5	85	141 8	159 4½	177 1
30	50 0	56 3	62 6	86	143 4	161 3	179 2
31	51 8	58 1½	64 7	87	145 0	163 1½	181 3
32	53 4	60 0	66 8	88	146 8	165 0	183 4
33	55 0	61 10½	68 9	89	148 4	166 10½	185 5
34	56 8	63 9	70 10	90	150 0	168 9	187 6
35	58 4	65 7½	72 11	91	151 8	170 7½	189 7
36	60 0	67 6	75 0	92	153 4	172 6	191 8
37	61 8	69 4½	77 1	93	155 0	174 4½	193 9
38	63 4	71 3	79 2	94	156 8	176 3	195 10
39	65 0	73 1½	81 3	95	158 4	178 1½	197 11
40	66 8	75 0	83 4	96	160 0	180 0	200 0
41	68 4	76 10½	85 5	97	161 8	181 10½	202 1
42	70 0	78 9	87 6	98	163 4	183 9	204 2
43	71 8	80 7½	89 7	99	165 0	185 7½	206 3
44	73 4	82 6	91 8	100	166 8	187 6	208 4
45	75 0	84 4½	93 9	200	333 4	375 0	416 8
46	76 8	86 3	95 10	300	500 0	562 6	625 0
47	78 4	88 1½	97 11	400	666 8	750 0	833 4
48	80 0	90 0	100 0	500	833 4	937 6	1041 8
49	81 8	91 10½	102 1	600	1000 0	1125 0	1250 0
50	83 4	93 9	104 2	700	1166 8	1312 6	1458 4
51	85 0	95 7½	106 3	800	1333 4	1500 0	1666 8
52	86 8	97 6	108 4	900	1500 0	1687 6	1875 0
53	88 4	99 4½	110 5	1000	1666 8	1875 0	2083 4
54	90 0	101 3	112 6	2000	3333 4	3750 0	4166 8
55	91 8	103 1½	114 7	3000	5000 0	5625 0	6250 0
56	93 4	105 0	116 8	4000	6666 8	7500 0	8333 4

Run. Feet.	Inches. 10 × 2¾	Inches. 10 × 3	Inches. 11 × 1	Run. Feet.	Inches. 10 × 2¾	Inches. 10 × 3	Inches. 11 × 1
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	2 3½	2 6	0 11	57	130 7½	142 6	52 3
2	4 7	5 0	1 10	58	132 11	145 0	53 2
3	6 10½	7 6	2 9	59	135 2½	147 6	54 1
4	9 2	10 0	3 8	60	137 6	150 0	55 0
5	11 5½	12 6	4 7	61	139 9½	152 6	55 11
6	13 9	15 0	5 6	62	142 1	155 0	56 10
7	16 0½	17 6	6 5	63	144 4½	157 6	57 9
8	18 4	20 0	7 4	64	146 8	160 0	58 8
9	20 7½	22 6	8 3	65	148 11½	162 6	59 7
10	22 11	25 0	9 2	66	151 3	165 0	60 6
11	25 2½	27 6	10 1	67	153 6½	167 6	61 5
12	27 6	30 0	11 0	68	155 10	170 0	62 4
13	29 9½	32 6	11 11	69	158 1½	172 6	63 3
14	32 1	35 0	12 10	70	160 5	175 0	64 2
15	34 4½	37 6	13 9	71	162 8½	177 6	65 1
16	36 8	40 0	14 8	72	165 0	180 0	66 0
17	38 11½	42 6	15 7	73	167 3½	182 6	66 11
18	41 3	45 0	16 6	74	169 7	185 0	67 10
19	43 6½	47 6	17 5	75	171 10½	187 6	68 9
20	45 10	50 0	18 4	76	174 2	190 0	69 8
21	48 1½	52 6	19 3	77	176 5½	192 6	70 7
22	50 5	55 0	20 2	78	178 9	195 0	71 6
23	52 8½	57 6	21 1	79	181 0½	197 6	72 5
24	55 0	60 0	22 0	80	183 4	200 0	73 4
25	57 3½	62 6	22 11	81	185 7½	202 6	74 3
26	59 7	65 0	23 10	82	187 11	205 0	75 2
27	61 10½	67 6	24 9	83	190 2½	207 6	76 1
28	64 2	70 0	25 8	84	192 6	210 0	77 0
29	66 5½	72 6	26 7	85	194 9½	212 6	77 11
30	68 9	75 0	27 6	86	197 1	215 0	78 10
31	71 0½	77 6	28 5	87	199 4½	217 6	79 9
32	73 4	80 0	29 4	88	201 8	220 0	80 8
33	75 7½	82 6	30 3	89	203 11½	222 6	81 7
34	77 11	85 0	31 2	90	206 3	225 0	82 6
35	80 2½	87 6	32 1	91	208 6½	227 6	83 5
36	82 6	90 0	33 0	92	210 10	230 0	84 4
37	84 9½	92 6	33 11	93	213 1½	232 6	85 3
38	87 1	95 0	34 10	94	215 5	235 0	86 2
39	89 4½	97 6	35 9	95	217 8½	237 6	87 1
40	91 8	100 0	36 8	96	220 0	240 0	88 0
41	93 11½	102 6	37 7	97	222 3½	242 6	88 11
42	96 3	105 0	38 6	98	224 7	245 0	89 10
43	98 6½	107 6	39 5	99	226 10½	247 6	90 9
44	100 10	110 0	40 4	100	229 2	250 0	91 8
45	103 1½	112 6	41 3	200	458 4	500 0	183 4
46	105 5	115 0	42 2	300	687 6	750 0	275 0
47	107 8½	117 6	43 1	400	916 8	1000 0	366 8
48	110 0	120 0	44 0	500	1145 10	1250 0	458 4
49	112 3½	122 6	44 11	600	1375 0	1500 0	550 0
50	114 7	125 0	45 10	700	1604 2	1750 0	641 8
51	116 10½	127 6	46 9	800	1833 4	2000 0	733 4
52	119 2	130 0	47 8	900	2062 6	2250 0	825 0
53	121 5½	132 6	48 7	1000	2291 8	2500 0	916 8
54	123 9	135 0	49 6	2000	4583 4	5000 0	1833 4
55	126 0½	137 6	50 5	3000	6875 0	7500 0	2750 0
56	128 4	140 0	51 4	4000	9166 8	10000 0	3666 8

Run. Feet.	Inches. 11 × 1¼	Inches. 11 × 1½	Inches. 11×1¾	Run. Feet.	Inches. 11 × 1¼	Inches. 11 × 1½	Inches. 11 × 1¾
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 1¾	1 4½	1 7¼	57	65 3¾	78 4½	91 5¼
2	2 3½	2 9	2 2½	58	66 5½	79 9	93 0½
3	3 5¼	4 1½	4 9¼	59	67 7¼	81 1½	94 7¼
4	4 7	5 6	6 5	60	68 9	82 6	96 3
5	5 8¾	6 10½	8 0¼	61	69 10¾	83 10½	97 10½
6	6 10½	8 3	9 7½	62	71 0½	85 3	99 5½
7	8 0¼	9 7½	11 2¾	63	72 2¼	86 7½	101 0¼
8	9 2	11 0	12 10	64	73 4	88 0	102 8
9	10 3¾	12 4½	14 5¼	65	74 5¾	89 4½	104 3¼
10	11 5½	13 9	16 0½	66	75 7½	90 9	105 10½
11	12 7¼	15 1½	17 7¾	67	76 9¼	92 1½	107 5¼
12	13 9	16 6	19 3	68	77 11	93 6	109 1
13	14 10¾	17 10½	20 10½	69	79 0¾	94 10½	110 8½
14	16 0½	19 3	22 5½	70	80 2½	96 3	112 3½
15	17 2¼	20 7½	24 0¾	71	81 4¼	97 7½	113 10¾
16	18 4	22 0	25 8	72	82 6	99 0	115 6
17	19 5¾	23 4½	27 3¼	73	83 7¾	100 4½	117 1¼
18	20 7½	24 9	28 10½	74	84 9½	101 9	118 8½
19	21 9¼	26 1½	30 5¾	75	85 11¼	103 1½	120 3¾
20	22 11	27 6	32 1	76	87 1	104 6	121 11
21	24 0¾	28 10½	33 8½	77	88 2¾	105 10½	123 6½
22	25 2½	30 3	35 3½	78	89 4½	107 3	125 1½
23	26 4¼	31 7½	36 10¾	79	90 6¼	108 7½	126 8¾
24	27 6	33 0	38 6	80	91 8	110 0	128 4
25	28 7¾	34 4½	40 1¼	81	92 9¾	111 4½	129 11¼
26	29 9½	35 9	41 8½	82	93 11½	112 9	131 6½
27	30 11¼	37 1½	43 3¾	83	95 1¼	114 1½	133 1¾
28	32 1	38 6	44 11	84	96 3	115 6	134 9
29	33 2¾	39 10½	46 6¼	85	97 4¾	116 10½	136 4¾
30	34 4½	41 3	48 1½	86	98 6½	118 3	137 11½
31	35 6¼	42 7½	49 8¾	87	99 8¼	119 7½	139 6¾
32	36 8	44 0	51 4	88	100 10	121 0	141 2
33	37 9¾	45 4½	52 11¼	89	101 11¾	122 4½	142 9¼
34	38 11½	46 9	54 6½	90	103 1½	123 9	144 4½
35	40 1¼	48 1½	56 1¾	91	104 3¼	125 1½	145 11¾
36	41 3	49 6	57 9	92	105 5	126 6	147 7
37	42 4¾	50 10½	59 4¼	93	106 6¾	127 10½	149 2¼
38	43 6½	52 3	60 11½	94	107 8½	129 3	150 9½
39	44 8¼	53 7½	62 6¾	95	108 10¼	130 7½	152 4¾
40	45 10	55 0	64 2	96	110 0	132 0	154 0
41	46 11¾	56 4½	65 9¼	97	111 1¾	133 4½	155 7¼
42	48 1½	57 9	67 4½	98	112 3½	134 9	157 2½
43	49 3¼	59 1½	68 11¾	99	113 5¼	136 1½	158 9¾
44	50 5	60 6	70 7	100	114 7	137 6	160 5
45	51 6¾	61 10½	72 2¼	200	229 2	275 0	320 10
46	52 8½	63 3	73 9½	300	343 9	412 6	481 3
47	53 10¼	64 7½	75 4¾	400	458 4	550 0	641 8
48	55 0	66 0	77 0	500	572 11	687 6	802 1
49	56 1¾	67 4½	78 7¼	600	687 6	825 0	962 6
50	57 3½	68 9	80 2½	700	802 1	962 6	1122 11
51	58 5¼	70 1½	81 9¾	800	916 8	1100 0	1283 4
52	59 7	71 6	83 5	900	1031 3	1237 6	1443 9
53	60 8¾	72 10½	85 0¼	1000	1145 10	1375 0	1604 2
54	61 10½	74 3	86 7½	2000	2291 8	2750 0	3208 4
55	63 0¼	75 7½	88 2¾	3000	3437 6	4125 0	4812 6
56	64 2	77 0	89 10	4000	4583 4	5500 0	6416 8

Run. Feet.	Inches. 11 × 2	Inches. 11 × 2¼	Inches. 11 × 2½	Run. Feet.	Inches. 11 × 2	Inches. 11 × 2¼	Inches. 11 × 2½
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 10	2 $0\frac{3}{4}$	2 $3\frac{1}{2}$	57	104 6	117 $6\frac{3}{4}$	130 $7\frac{1}{2}$
2	3 8	4 $1\frac{1}{2}$	4 7	58	106 4	119 $7\frac{1}{2}$	132 11
3	5 6	6 $2\frac{1}{4}$	6 $10\frac{1}{2}$	59	108 2	121 $8\frac{1}{4}$	135 $2\frac{1}{2}$
4	7 4	8 3	9 2	60	110 0	123 9	137 6
5	9 2	10 $3\frac{3}{4}$	11 $5\frac{1}{2}$	61	111 10	125 $9\frac{1}{4}$	139 $9\frac{1}{2}$
6	11 0	12 $4\frac{1}{2}$	13 9	62	113 8	127 $10\frac{1}{2}$	142 1
7	12 10	14 $5\frac{1}{4}$	16 $0\frac{1}{2}$	63	115 6	129 $11\frac{1}{4}$	144 $4\frac{1}{2}$
8	14 8	16 6	18 4	64	117 4	132 0	146 8
9	16 6	18 $6\frac{3}{4}$	20 $7\frac{1}{2}$	65	119 2	134 $0\frac{3}{4}$	148 $11\frac{1}{2}$
10	18 4	20 $7\frac{1}{2}$	22 11	66	121 0	136 $1\frac{1}{2}$	151 3
11	20 2	22 $8\frac{1}{4}$	25 $2\frac{1}{2}$	67	122 10	138 $2\frac{1}{4}$	153 $6\frac{1}{2}$
12	22 0	24 9	27 6	68	124 8	140 3	155 10
13	23 10	26 $9\frac{3}{4}$	29 $9\frac{1}{2}$	69	126 6	142 $3\frac{3}{4}$	158 $1\frac{1}{2}$
14	25 8	28 $10\frac{1}{2}$	32 1	70	128 4	144 $4\frac{1}{2}$	160 5
15	27 6	30 $11\frac{1}{4}$	34 $4\frac{1}{2}$	71	130 2	146 $5\frac{1}{4}$	162 $8\frac{1}{2}$
16	29 4	33 0	36 8	72	132 0	148 6	165 0
17	31 2	35 $0\frac{3}{4}$	38 $11\frac{1}{2}$	73	133 10	150 $6\frac{3}{4}$	167 $3\frac{1}{2}$
18	33 0	37 $1\frac{1}{2}$	41 3	74	135 8	152 $7\frac{1}{2}$	169 7
19	34 10	39 $2\frac{1}{4}$	43 $6\frac{1}{2}$	75	137 6	154 $8\frac{1}{4}$	171 $10\frac{1}{2}$
20	36 8	41 3	45 10	76	139 4	156 9	174 2
21	38 6	43 $3\frac{3}{4}$	48 $1\frac{1}{2}$	77	141 2	158 $9\frac{3}{4}$	176 $5\frac{1}{2}$
22	40 4	45 $4\frac{1}{2}$	50 5	78	143 0	160 $10\frac{1}{2}$	178 9
23	42 2	47 $5\frac{1}{4}$	52 $8\frac{1}{2}$	79	144 10	162 $11\frac{1}{4}$	181 $0\frac{1}{2}$
24	44 0	49 6	55 0	80	146 8	165 0	183 4
25	45 10	51 $6\frac{3}{4}$	57 $3\frac{1}{2}$	81	148 6	167 $0\frac{3}{4}$	185 $7\frac{1}{2}$
26	47 8	53 $7\frac{1}{2}$	59 7	82	150 4	169 $1\frac{1}{2}$	187 11
27	49 6	55 $8\frac{1}{4}$	61 $10\frac{1}{2}$	83	152 2	171 $2\frac{1}{4}$	190 $2\frac{1}{2}$
28	51 4	57 9	64 2	84	154 0	173 3	192 6
29	53 2	59 $9\frac{3}{4}$	66 $5\frac{1}{2}$	85	155 10	175 $3\frac{3}{4}$	194 $9\frac{1}{2}$
30	55 0	61 $10\frac{1}{2}$	68 9	86	157 8	177 $4\frac{1}{2}$	197 1
31	56 10	63 $11\frac{1}{4}$	71 $0\frac{1}{2}$	87	159 6	179 $5\frac{1}{4}$	199 $4\frac{1}{2}$
32	58 8	66 0	73 4	88	161 4	181 6	201 8
33	60 6	68 $0\frac{3}{4}$	75 $7\frac{1}{2}$	89	163 2	183 $6\frac{3}{4}$	203 $11\frac{1}{2}$
34	62 4	70 $1\frac{1}{2}$	77 11	90	165 0	185 $7\frac{1}{2}$	206 3
35	64 2	72 $2\frac{1}{4}$	80 $2\frac{1}{2}$	91	166 10	187 $8\frac{1}{4}$	208 $6\frac{1}{2}$
36	66 0	74 3	82 6	92	168 8	189 9	210 10
37	67 10	76 $3\frac{3}{4}$	84 $9\frac{1}{2}$	93	170 6	191 $9\frac{3}{4}$	213 $1\frac{1}{2}$
38	69 8	78 $4\frac{1}{2}$	87 1	94	172 4	193 $10\frac{1}{2}$	215 5
39	71 6	80 $5\frac{1}{4}$	89 $4\frac{1}{2}$	95	174 2	195 $11\frac{1}{4}$	217 $8\frac{1}{2}$
40	73 4	82 6	91 8	96	176 0	198 0	220 0
41	75 2	84 $6\frac{3}{4}$	93 $11\frac{1}{2}$	97	177 10	200 $0\frac{3}{4}$	222 $3\frac{1}{2}$
42	77 0	86 $7\frac{1}{2}$	96 3	98	179 8	202 $1\frac{1}{2}$	224 7
43	78 10	88 $8\frac{1}{4}$	98 $6\frac{1}{2}$	99	181 6	204 $2\frac{1}{4}$	226 $10\frac{1}{2}$
44	80 8	90 9	100 10	100	183 4	206 3	229 2
45	82 6	92 $9\frac{3}{4}$	103 $1\frac{1}{2}$	200	366 8	412 6	458 4
46	84 4	94 $10\frac{1}{2}$	105 5	300	550 0	618 9	687 6
47	86 2	96 $11\frac{1}{4}$	107 $8\frac{1}{2}$	400	733 4	825 0	916 8
48	88 0	99 0	110 0	500	916 8	1031 3	1145 10
49	89 10	101 $0\frac{3}{4}$	112 $3\frac{1}{2}$	600	1100 0	1237 6	1375 0
50	91 8	103 $1\frac{1}{2}$	114 7	700	1283 4	1443 9	1604 2
51	93 6	105 $2\frac{1}{4}$	116 $10\frac{1}{2}$	800	1466 8	1650 0	1833 4
52	95 4	107 3	119 2	900	1650 0	1856 3	2062 6
53	97 2	109 $3\frac{3}{4}$	121 $5\frac{1}{2}$	1000	1833 4	2062 6	2291 8
54	99 0	111 $4\frac{1}{2}$	123 9	2000	3666 8	4125 0	4583 4
55	100 10	113 $5\frac{1}{4}$	126 $0\frac{1}{2}$	3000	5500 0	6187 6	6875 0
56	102 8	115 6	128 4	4000	7333 4	8250 0	9166 8

Run. Feet.	Inches. 11 × 2¾	Inches. 11 × 3	Inches. 12 × 1	Run. Feet.	Inches. 11 × 2¾	Inches. 11 × 3	Inches. 12 × 1
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	2 6¼	2 9	1 0	57	143 8¼	156 9	57 0
2	5 0½	5 6	2 0	58	146 2½	159 6	58 0
3	7 6¾	8 3	3 0	59	148 8¾	162 3	59 0
4	10 1	11 0	4 0	60	151 3	165 0	60 0
5	12 7¼	13 9	5 0	61	153 9¼	167 9	61 0
6	15 1½	16 6	6 0	62	156 3½	170 6	62 0
7	17 7¾	19 3	7 0	63	158 9¾	173 3	63 0
8	20 2	22 0	8 0	64	161 4	176 0	64 0
9	22 8¼	24 9	9 0	65	163 10¼	178 9	65 0
10	25 2½	27 6	10 0	66	166 4½	181 6	66 0
11	27 8¾	30 3	11 0	67	168 10¾	184 3	67 0
12	30 3	33 0	12 0	68	171 5	187 0	68 0
13	32 9¼	35 9	13 0	69	173 11¼	189 9	69 0
14	35 3½	38 6	14 0	70	176 5½	192 6	70 0
15	37 9¾	41 3	15 0	71	178 11¾	195 3	71 0
16	40 4	44 0	16 0	72	181 6	198 0	72 0
17	42 10¼	46 9	17 0	73	184 0¼	200 9	73 0
18	45 4½	49 6	18 0	74	186 6½	203 6	74 0
19	47 10¾	52 3	19 0	75	189 0¾	206 3	75 0
20	50 5	55 0	20 0	76	191 7	209 0	76 0
21	52 11¼	57 9	21 0	77	194 1¼	211 9	77 0
22	55 5½	60 6	22 0	78	196 7½	214 6	78 0
23	57 11¾	63 3	23 0	79	199 1¾	217 3	79 0
24	60 6	66 0	24 0	80	201 8	220 0	80 0
25	63 0¼	68 9	25 0	81	204 2¼	222 9	81 0
26	65 6½	71 6	26 0	82	206 8½	225 6	82 0
27	68 0¾	74 3	27 0	83	209 2¾	228 3	83 0
28	70 7	77 0	28 0	84	211 9	221 0	84 0
29	73 1¼	79 9	29 0	85	214 3¼	233 9	85 0
30	75 7½	82 6	30 0	86	216 9½	236 6	86 0
31	78 1¾	85 3	31 0	87	219 3¾	239 3	87 0
32	80 8	88 0	32 0	88	221 10	242 0	88 0
33	83 2¼	90 9	33 0	89	224 4¼	244 9	89 0
34	85 8½	93 6	34 0	90	226 10½	247 6	90 0
35	88 2¾	96 3	35 0	91	229 4¾	250 3	91 0
36	90 9	99 0	36 0	92	231 11	253 0	92 0
37	93 3¼	101 9	37 0	93	234 5¼	255 9	93 0
38	95 9½	104 6	38 0	94	236 11½	258 6	94 0
39	98 3¾	107 3	39 0	95	239 5¾	261 3	95 0
40	100 10	110 0	40 0	96	242 0	264 0	96 0
41	103 4¼	112 9	41 0	97	244 6¼	266 9	97 0
42	105 10½	115 6	42 0	98	247 0½	269 6	98 0
43	108 4¾	118 3	43 0	99	249 6¾	272 3	99 0
44	110 11	121 0	44 0	100	252 1	275 0	100 0
45	113 5¼	123 9	45 0	200	504 2	550 0	200 0
46	115 11½	126 6	46 0	300	756 3	825 0	300 0
47	118 5¾	129 3	47 0	400	1008 4	1100 0	400 0
48	121 0	132 0	48 0	500	1260 5	1375 0	500 0
49	123 6¼	134 9	49 0	600	1512 6	1650 0	600 0
50	126 0½	137 6	50 0	700	1764 7	1925 0	700 0
51	128 6¾	140 3	51 0	800	2016 8	2200 0	800 0
52	131 1	143 0	52 0	900	2268 9	2475 0	900 0
53	133 7¼	145 9	53 0	1000	2520 10	2750 0	1000 0
54	136 1½	148 6	54 0	2000	5041 8	5500 0	2000 0
55	138 7¾	151 3	55 0	3000	7562 6	8250 0	3000 0
56	141 2	154 0	56 0	4000	10083 4	11000 0	4000 0

Run. Feet.	Inches. 12 × 1¼	Inches. 12 × 1½	Inches. 12 × 1¾	Run. Feet.	Inches. 12 × 1¼	Inches. 12 × 1½	Inches. 12 × 1¾
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	1 3	1 6	1 9	57	71 3	85 6	99 9
2	2 6	3 0	3 6	58	72 6	87 0	101 6
3	3 9	4 6	5 3	59	73 9	88 6	103 3
4	5 0	6 0	7 0	60	75 0	90 0	105 0
5	6 3	7 6	8 9	61	76 3	91 6	106 9
6	7 6	9 0	10 6	62	77 6	93 0	108 6
7	8 9	10 6	12 3	63	78 9	94 6	110 3
8	10 0	12 0	14 0	64	80 0	96 0	112 0
9	11 3	13 6	15 9	65	81 3	97 6	113 9
10	12 6	15 0	17 6	66	82 6	99 0	115 6
11	13 9	16 6	19 3	67	83 9	100 6	117 3
12	15 0	18 0	21 0	68	85 0	102 0	119 0
13	16 3	19 6	22 9	69	86 3	103 6	120 9
14	17 6	21 0	24 6	70	87 6	105 0	122 6
15	18 9	22 6	26 3	71	88 9	106 6	124 3
16	20 0	24 0	28 0	72	90 0	108 0	126 0
17	21 3	25 6	29 9	73	91 3	109 6	127 9
18	22 6	27 0	31 6	74	92 6	111 0	129 6
19	23 9	28 6	33 3	75	93 9	112 6	131 3
20	25 0	30 0	35 0	76	95 0	114 0	133 0
21	26 3	31 6	36 9	77	96 3	115 6	134 9
22	27 6	33 0	38 6	78	97 6	117 0	136 6
23	28 9	34 6	40 3	79	98 9	118 6	138 3
24	30 0	36 0	42 0	80	100 0	120 0	140 0
25	31 3	37 6	43 9	81	101 3	121 6	141 9
26	32 6	39 0	45 6	82	102 6	123 0	143 6
27	33 9	40 6	47 3	83	103 9	124 6	145 3
28	35 0	42 0	49 0	84	105 0	126 0	147 0
29	36 3	43 6	50 9	85	106 3	127 6	148 9
30	37 6	45 0	52 6	86	107 6	129 0	150 6
31	38 9	46 6	54 3	87	108 9	130 6	152 3
32	40 0	48 0	56 0	88	110 0	132 0	154 0
33	41 3	49 6	57 9	89	111 3	133 6	155 9
34	42 6	51 0	59 6	90	112 6	135 0	157 6
35	43 9	52 6	61 3	91	113 9	136 6	159 3
36	45 0	54 0	63 0	92	115 0	138 0	161 0
37	46 3	55 6	64 9	93	116 3	139 6	162 9
38	47 6	57 0	66 6	94	117 6	141 0	164 6
39	48 9	58 6	68 3	95	118 9	142 6	166 3
40	50 0	60 0	70 0	96	120 0	144 0	168 0
41	51 3	61 6	71 9	97	121 3	145 6	169 9
42	52 6	63 0	73 6	98	122 6	147 0	171 6
43	53 9	64 6	75 3	99	123 9	148 6	173 3
44	55 0	66 0	77 0	100	125 0	150 0	175 0
45	56 3	67 6	78 9	200	250 0	300 0	350 0
46	57 6	69 0	80 6	300	375 0	450 0	525 0
47	58 9	70 6	82 3	400	500 0	600 0	700 0
48	60 0	72 0	84 0	500	625 0	750 0	875 0
49	61 3	73 6	85 9	600	750 0	900 0	1050 0
50	62 6	75 0	87 6	700	875 0	1050 0	1225 0
51	63 9	76 6	89 3	800	1000 0	1200 0	1400 0
52	65 0	78 0	91 0	900	1125 0	1350 0	1575 0
53	66 3	79 6	92 9	1000	1250 0	1500 0	1750 0
54	67 6	81 0	94 6	2000	2500 0	3000 0	3500 0
55	68 9	82 6	96 3	3000	3750 0	4500 0	5250 0
56	70 0	84 0	98 0	4000	5000 0	6000 0	7000 0

Run. Feet.	Inches. 12 × 2	Inches. 12 × 2¼	Inches. 12 × 2½	Run. Feet.	Inches. 12 × 2	Inches. 12 × 2¼	Inches. 12 × 2½
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	2 0	2 3	2 6	57	114 0	128 3	142 6
2	4 0	4 6	5 0	58	116 0	130 6	145 0
3	6 0	6 9	7 6	59	118 0	132 9	147 6
4	8 0	9 0	10 0	60	120 0	135 0	150 0
5	10 0	11 3	12 6	61	122 0	137 3	152 6
6	12 0	13 6	15 0	62	124 0	139 6	155 0
7	14 0	15 9	17 6	63	126 0	141 9	157 6
8	16 0	18 0	20 0	64	128 0	144 0	160 0
9	18 0	20 3	22 6	65	130 0	146 3	162 6
10	20 0	22 6	25 0	66	132 0	148 6	165 0
11	22 0	24 9	27 6	67	134 0	150 9	167 6
12	24 0	27 0	30 0	68	136 0	153 0	170 0
13	26 0	29 3	32 6	69	138 0	155 3	172 6
14	28 0	31 6	35 0	70	140 0	157 6	175 0
15	30 0	33 9	37 6	71	142 0	159 9	177 6
16	32 0	36 0	40 0	72	144 0	162 0	180 0
17	34 0	38 3	42 6	73	146 0	164 3	182 6
18	36 0	40 6	45 0	74	148 0	166 6	185 0
19	38 0	42 9	47 6	75	150 0	168 9	187 6
20	40 0	45 0	50 0	76	152 0	171 0	190 0
21	42 0	47 3	52 6	77	154 0	173 3	192 6
22	44 0	49 6	55 0	78	156 0	175 6	195 0
23	46 0	51 9	57 6	79	158 0	177 9	197 6
24	48 0	54 0	60 0	80	160 0	180 0	200 0
25	50 0	56 3	62 6	81	162 0	182 3	202 6
26	52 0	58 6	65 0	82	164 0	184 6	205 0
27	54 0	60 9	67 6	83	166 0	186 9	207 6
28	56 0	63 0	70 0	84	168 0	189 0	210 0
29	58 0	65 3	72 6	85	170 0	191 3	212 6
30	60 0	67 6	75 0	86	172 0	193 6	215 0
31	62 0	69 9	77 6	87	174 0	195 9	217 6
32	64 0	72 0	80 0	88	176 0	198 0	220 0
33	66 0	74 3	82 6	89	178 0	200 3	222 6
34	68 0	76 6	85 0	90	180 0	202 6	225 0
35	70 0	78 9	87 6	91	182 0	204 9	227 6
36	72 0	81 0	90 0	92	184 0	207 0	230 0
37	74 0	83 3	92 6	93	186 0	209 3	232 6
38	76 0	85 6	95 0	94	188 0	211 6	235 0
39	78 0	87 9	97 6	95	190 0	213 9	237 6
40	80 0	90 0	100 0	96	192 0	216 0	240 0
41	82 0	92 3	102 6	97	194 0	218 3	242 6
42	84 0	94 6	105 0	98	196 0	220 6	245 0
43	86 0	96 9	107 6	99	198 0	222 9	247 6
44	88 0	99 0	110 0	100	200 0	225 0	250 0
45	90 0	101 3	112 6	200	400 0	450 0	500 0
46	92 0	103 6	115 0	300	600 0	675 0	750 0
47	94 0	105 9	117 6	400	800 0	900 0	1000 0
48	96 0	108 0	120 0	500	1000 0	1125 0	1250 0
49	98 0	110 3	122 6	600	1200 0	1350 0	1500 0
50	100 0	112 6	125 0	700	1400 0	1575 0	1750 0
51	102 0	114 9	127 6	800	1600 0	1800 0	2000 0
52	104 0	117 0	130 0	900	1800 0	2025 0	2250 0
53	106 0	119 3	132 6	1000	2000 0	2250 0	2500 0
54	108 0	121 6	135 0	2000	4000 0	4500 0	5000 0
55	110 0	123 9	137 6	3000	6000 0	6750 0	7500 0
56	112 0	126 0	140 0	4000	8000 0	9000 0	10000 0

Run. Feet.	Inches. 12 × 2¾	Inches. 12 × 3	Inches. 13 × 3	Run. Feet.	Inches. 12 × 2¾	Inches. 12 × 3	Inches. 13 × 3
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	2 9	3 0	3 3	57	156 9	171 0	185 3
2	5 6	6 0	6 6	58	159 6	174 0	188 6
3	8 3	9 0	9 9	59	162 3	177 0	191 9
4	11 0	12 0	13 0	60	165 0	180 0	195 0
5	13 9	15 0	16 3	61	167 9	183 0	198 3
6	16 6	18 0	19 6	62	170 6	186 0	201 6
7	19 3	21 0	22 9	63	173 3	189 0	204 9
8	22 0	24 0	26 0	64	176 0	192 0	208 0
9	24 9	27 0	29 3	65	178 9	195 0	211 3
10	27 6	30 0	32 6	66	181 6	198 0	214 6
11	30 3	33 0	35 9	67	184 3	201 0	217 9
12	33 0	36 0	39 0	68	187 0	204 0	221 0
13	35 9	39 0	42 3	69	189 9	207 0	224 3
14	38 6	42 0	45 6	70	192 6	210 0	227 6
15	41 3	45 0	48 9	71	195 3	213 0	230 9
16	44 0	48 0	52 0	72	198 0	216 0	234 0
17	46 9	51 0	55 3	73	200 9	219 0	237 3
18	49 6	54 0	58 6	74	203 6	222 0	240 6
19	52 3	57 0	61 9	75	206 3	225 0	243 9
20	55 0	60 0	65 0	76	209 0	228 0	247 0
21	57 9	63 0	68 3	77	211 9	231 0	250 3
22	60 6	66 0	71 6	78	214 6	234 0	253 6
23	63 3	69 0	74 9	79	217 3	237 0	256 9
24	66 0	72 0	78 0	80	220 0	240 0	260 0
25	68 9	75 0	81 3	81	222 9	243 0	263 3
26	71 6	78 0	84 6	82	225 6	246 0	266 6
27	74 3	81 0	87 9	83	228 3	249 0	269 9
28	77 0	84 0	91 0	84	231 0	252 0	273 0
29	79 9	87 0	94 3	85	233 9	255 0	276 3
30	82 6	90 0	97 6	86	236 6	258 0	279 6
31	85 3	93 0	100 9	87	239 3	261 0	282 9
32	88 0	96 0	104 0	88	242 0	264 0	286 0
33	90 9	99 0	107 3	89	244 9	267 0	289 3
34	93 6	102 0	110 6	90	247 6	270 0	292 6
35	96 3	105 0	113 9	91	250 3	273 0	295 9
36	99 0	108 0	117 0	92	253 0	276 0	299 0
37	101 9	111 0	120 3	93	255 9	279 0	302 3
38	104 6	114 0	123 6	94	258 6	282 0	305 6
39	107 3	117 0	126 9	95	261 3	285 0	308 9
40	110 0	120 0	130 0	96	264 0	288 0	312 0
41	112 9	123 0	133 3	97	266 9	291 0	315 3
42	115 6	126 0	136 6	98	269 6	294 0	318 6
43	118 3	129 0	139 9	99	272 3	297 0	321 9
44	121 0	132 0	143 0	100	275 0	300 0	325 0
45	123 9	135 0	146 3	200	550 0	600 0	650 0
46	126 6	138 0	149 6	300	825 0	900 0	975 0
47	129 3	141 0	152 9	400	1100 0	1200 0	1300 0
48	132 0	144 0	156 0	500	1375 0	1500 0	1625 0
49	134 9	147 0	159 3	600	1650 0	1800 0	1950 0
50	137 6	150 0	162 6	700	1925 0	2100 0	2275 0
51	140 3	153 0	165 9	800	2200 0	2400 0	2600 0
52	143 0	156 0	169 0	900	2475 0	2700 0	2925 0
53	145 9	159 0	172 3	1000	2750 0	3000 0	3250 0
54	148 6	162 0	175 6	2000	5500 0	6000 0	6500 0
55	151 3	165 0	178 9	3000	8250 0	9000 0	9750 0
56	154 0	168 0	182 0	4000	11000 0	12000 0	13000 0

Run. Feet.	Inches. 14 × 3	Inches. 15 × 3	Inches. 16 × 3	Run. Feet.	Inches. 14 × 3	Inches. 15 × 3	Inches. 16 × 3
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	3 6	3 9	4 0	57	199 6	213 9	228 0
2	7 0	7 6	8 0	58	203 0	217 6	232 0
3	10 6	11 3	12 0	59	206 6	221 3	236 0
4	14 0	15 0	16 0	60	210 0	225 0	240 0
5	17 6	18 9	20 0	61	213 6	228 9	244 0
6	21 0	22 6	24 0	62	217 0	232 6	248 0
7	24 6	26 3	28 0	63	220 6	236 3	252 0
8	28 0	30 0	32 0	64	224 0	240 0	256 0
9	31 6	33 9	36 0	65	227 6	243 9	260 0
10	35 0	37 6	40 0	66	231 0	247 6	264 0
11	38 6	41 3	44 0	67	234 6	251 3	268 0
12	42 0	45 0	48 0	68	238 0	255 0	272 0
13	45 6	48 9	52 0	69	241 6	258 9	276 0
14	49 0	52 6	56 0	70	245 0	262 6	280 0
15	52 6	56 3	60 0	71	248 6	266 3	284 0
16	56 0	60 0	64 0	72	252 0	270 0	288 0
17	59 6	63 9	68 0	73	255 6	273 9	292 0
18	63 0	67 6	72 0	74	259 0	277 6	296 0
19	66 6	71 3	76 0	75	262 6	281 3	300 0
20	70 0	75 0	80 0	76	266 0	285 0	304 0
21	73 6	78 9	84 0	77	269 6	288 9	308 0
22	77 0	82 6	88 0	78	273 0	292 6	312 0
23	80 6	86 3	92 0	79	276 6	296 3	316 0
24	84 0	90 0	96 0	80	280 0	300 0	320 0
25	87 6	93 9	100 0	81	283 6	303 9	324 0
26	91 0	97 6	104 0	82	287 0	307 6	328 0
27	94 6	101 3	108 0	83	290 6	311 3	332 0
28	98 0	105 0	112 0	84	294 0	315 0	336 0
29	101 6	108 9	116 0	85	297 6	318 9	340 0
30	105 0	112 6	120 0	86	301 0	322 6	344 0
31	108 6	116 3	124 0	87	304 6	326 3	348 0
32	112 0	120 0	128 0	88	308 0	330 0	352 0
33	115 6	123 9	132 0	89	311 6	333 9	356 0
34	119 0	127 6	136 0	90	315 0	337 6	360 0
35	122 6	131 3	140 0	91	318 6	341 3	364 0
36	126 0	135 0	144 0	92	322 0	345 0	368 0
37	129 6	138 9	148 0	93	325 6	348 9	372 0
38	133 0	142 6	152 0	94	329 0	352 6	376 0
39	136 6	146 3	156 0	95	332 6	356 3	380 0
40	140 0	150 0	160 0	96	336 0	360 0	384 0
41	143 6	153 9	164 0	97	339 6	363 9	388 0
42	147 0	157 6	168 0	98	343 0	367 6	392 0
43	150 6	161 3	172 0	99	346 6	371 3	396 0
44	154 0	165 0	176 0	100	350 0	375 0	400 0
45	157 6	168 9	180 0	200	700 0	750 0	800 0
46	161 0	172 6	184 0	300	1050 0	1125 0	1200 0
47	164 6	176 3	188 0	400	1400 0	1500 0	1600 0
48	168 0	180 0	192 0	500	1750 0	1875 0	2000 0
49	171 6	183 9	196 0	600	2100 0	2250 0	2400 0
50	175 0	187 6	200 0	700	2450 0	2625 0	2800 0
51	178 6	191 3	204 0	800	2800 0	3000 0	3200 0
52	182 0	195 0	208 0	900	3150 0	3375 0	3600 0
53	185 6	198 9	212 0	1000	3500 0	3750 0	4000 0
54	189 0	202 6	216 0	2000	7000 0	7500 0	8000 0
55	192 6	206 3	220 0	3000	10500 0	11250 0	12000 0
56	196 0	210 0	224 0	4000	14000 0	15000 0	16000 0

Run. Feet.	Inches. 17 × 3	Inches. 18 × 3	Inches. 19 × 3	Run. Feet.	Inches. 17 × 3	Inches. 18 × 3	Inches. 19 × 3
	ft. in.	ft. in.	ft. in.		ft. in.	ft. in.	ft. in.
1	4 3	4 6	4 9	57	242 3	256 6	270 9
2	8 6	9 0	9 6	58	246 6	261 0	275 6
3	12 9	13 6	14 3	59	250 9	265 6	280 3
4	17 0	18 0	19 0	60	255 0	270 0	285 0
5	21 3	22 6	23 9	61	259 3	274 6	289 9
6	25 6	27 0	28 6	62	263 6	279 0	294 6
7	29 9	31 6	33 3	63	267 9	283 6	299 3
8	34 0	36 0	38 0	64	272 0	288 0	304 0
9	38 3	40 6	42 9	65	276 3	292 6	308 9
10	42 6	45 0	47 6	66	280 6	297 0	313 6
11	46 9	49 6	52 3	67	284 9	301 6	318 3
12	51 0	54 0	57 0	68	289 0	306 0	323 0
13	55 3	58 6	61 9	69	293 3	310 6	327 9
14	59 6	63 0	66 6	70	297 6	315 0	332 6
15	63 9	67 6	71 3	71	301 9	319 6	337 3
16	68 0	72 0	76 0	72	306 0	324 0	342 0
17	72 3	76 6	80 9	73	310 3	328 6	346 9
18	76 6	81 0	85 6	74	314 6	333 0	351 6
19	80 9	85 6	90 3	75	318 9	337 6	356 3
20	85 0	90 0	95 0	76	323 0	342 0	361 0
21	89 3	94 6	99 9	77	327 3	346 6	365 9
22	93 6	99 0	104 6	78	331 6	351 0	370 6
23	97 9	103 6	109 3	79	335 9	355 6	375 3
24	102 0	108 0	114 0	80	340 0	360 0	380 0
25	106 3	112 6	118 9	81	344 3	364 6	384 9
26	110 6	117 0	123 6	82	348 6	369 0	389 6
27	114 9	121 6	128 3	83	352 9	373 6	394 3
28	119 0	126 0	133 0	84	357 0	378 0	399 0
29	123 3	130 6	137 9	85	361 3	382 6	403 9
30	127 6	135 0	142 6	86	365 6	387 0	408 6
31	131 9	139 6	147 3	87	369 9	391 6	413 3
32	136 0	144 0	152 0	88	374 0	396 0	418 0
33	140 3	148 6	156 9	89	378 3	400 6	422 9
34	144 6	153 0	161 6	90	382 6	405 0	427 6
35	148 9	157 6	166 3	91	386 9	409 6	432 3
36	153 0	162 0	171 0	92	391 0	414 0	437 0
37	157 3	166 6	175 9	93	395 3	418 6	441 9
38	161 6	171 0	180 6	94	399 6	423 0	446 6
39	165 9	175 6	185 3	95	403 9	427 6	451 3
40	170 0	180 0	190 0	96	408 0	432 0	456 0
41	174 3	184 6	194 9	97	412 3	436 6	460 9
42	178 6	189 0	199 6	98	416 6	441 0	465 6
43	182 9	193 6	204 3	99	420 9	445 6	470 3
44	187 0	198 0	209 0	100	425 0	450 0	475 0
45	191 3	202 6	213 9	200	850 0	900 0	950 0
46	195 6	207 0	218 6	300	1275 0	1350 0	1425 0
47	199 9	211 6	223 3	400	1700 0	1800 0	1900 0
48	204 0	216 0	228 0	500	2125 0	2250 0	2375 0
49	208 3	220 6	232 9	600	2550 0	2700 0	2850 0
50	212 6	225 0	237 6	700	2975 0	3150 0	3325 0
51	216 9	229 6	242 3	800	3400 0	3600 0	3800 0
52	221 0	234 0	247 0	900	3825 0	4050 0	4275 0
53	225 3	238 6	251 9	1000	4250 0	4500 0	4750 0
54	229 6	243 0	256 6	2000	8500 0	9000 0	9500 0
55	233 9	247 6	261 3	3000	12750 0	13500 0	14250 0
56	238 0	252 0	266 0	4000	17000 0	18000 0	19000 0

(*See p.* 406).

Super. Feet of 1 Inch.	Cubic Feet.	Cubic In.	Christiania Standards.	Drammen Standards.	Petersburg Standards.	Quebec Standards.
1	0	1	·10	·08	·06	·04
2	0	2	·19	·16	·12	·07
3	0	3	·29	·25	·18	·11
4	0	4	·39	·33	·24	·15
5	0	5	·48	·41	·30	·18
6	0	6	·58	·49	·36	·22
7	0	7	·68	·57	·42	·25
8	0	8	·78	·66	·48	·29
9	0	9	·87	·74	·54	·33
10	0	10	·97	·82	·60	·36
$10\frac{5}{16}$	0	$10\frac{5}{16}$	1·	·85	·62	·37
11	0	11	1·07	·90	·66	·40
12	1	0	1·16	·99	·73	·44
$12\frac{3}{16}$	1	$0\frac{3}{16}$	1·18	1·	·74	·44
13	1	1	1·26	1·07	·79	·47
14	1	2	1·36	1·15	·85	·51
15	1	3	1·46	1·23	·91	·55
16	1	4	1·55	1·31	·97	·58
$16\frac{1}{2}$	1	$4\frac{1}{2}$	1 60	1·35	1·	·60
17	1	5	1·65	1·39	1·03	·62
18	1	6	1·75	1·47	1·09	·65
19	1	7	1·84	1·56	1·15	·69
20	1	8	1·94	1·64	1·21	·73
$20\frac{5}{8}$	1	$8\frac{5}{8}$	2·	1·69	1·25	·75
21	1	9	2·04	1·72	1·27	·76
22	1	10	2·13	1·80	1·33	·80
23	1	11	2·23	1·88	1·39	·84
24	2	0	2·33	1·96	1·45	·87
$24\frac{3}{8}$	2	$0\frac{3}{8}$	2·36	2·	1·48	·89
25	2	1	2·42	2·05	1·51	·91
26	2	2	2·52	2·14	1·58	·95
27	2	3	2·62	2·22	1·64	·98
$27\frac{1}{2}$	2	$3\frac{1}{2}$	2·67	2·26	1·66	1·
28	2	4	2·72	2·30	1·70	1·02
29	2	5	2·81	2·38	1·76	1·05
30	2	6	2·91	2·46	1·82	1·09
31	2	7	3·01	2·55	1·88	1·13
32	2	8	3·10	2·63	1·94	1·16
33	2	9	3·20	2·71	2·	1·20
34	2	10	3·30	2·79	2·06	1·24
35	2	11	3·39	2·87	2·12	1·27
36	3	0	3·49	2·95	2·18	1·31
$36\frac{9}{16}$	3	$0\frac{9}{16}$	3·55	3·	2·22	1·33
37	3	1	3·59	3·04	2·24	1·35
38	3	2	3·68	3·12	2·30	1·38

Super. Feet of 1 Inch.	Cubic Feet.	Cubic In.	Christiania Standards.	Drammen Standards.	Petersburg Standards.	Quebec Standards.
39	3	3	3·78	3·20	2·36	1·42
40	3	4	3·88	3·28	2·42	1·45
41	3	5	3·98	3·36	2·48	1·49
42	3	6	4·07	3·44	2·54	1·53
43	3	7	4·17	3·52	2·60	1·56
44	3	8	4·27	3·61	2·66	1·60
45	3	9	4·36	3·69	2·73	1·64
46	3	10	4·46	3·77	2·79	1·67
47	3	11	4·56	3·86	2·85	1·71
48	4	0	4·65	3·94	2·91	1·75
48¾	4	0¾	4·73	4·	2·95	1·77
49	4	1	4·75	4·02	2·97	1·78
49½	4	1½	4·80	4·06	3·	1·80
50	4	2	4·85	4·10	3·03	1·82
51	4	3	4·95	4·18	3·09	1·85
52	4	4	5·04	4·26	3·15	1·89
53	4	5	5·14	4·34	3·21	1·93
54	4	6	5·24	4·43	3·27	1·96
55	4	7	5·33	4·51	3·33	2·
56	4	8	5·43	4·60	3·39	2·04
57	4	9	5·53	4·68	3·45	2·07
58	4	10	5·62	4·76	3·51	2·11
59	4	11	5·72	4·84	3·58	2·15
60	5	0	5·82	4·92	3·64	2·18
60 15/16	5	0 15/16	5·91	5·	3·69	2·22
61	5	1	5·92	5·01	3·70	2·22
62	5	2	6·01	5·09	3·76	2·25
63	5	3	6·11	5·17	3·82	2·29
64	5	4	6·21	5·25	3·88	2·33
65	5	5	6·30	5·33	3·94	2·36
66	5	6	6·40	5·42	4·	2·40
67	5	7	6·50	5·50	4·06	2·44
68	5	8	6·59	5·58	4·12	2·47
69	5	9	6·69	5·66	4·18	2·51
70	5	10	6·79	5·74	4·24	2·55
71	5	11	6·88	5·82	4·30	2·58
72	6	0	6·98	5·91	4·36	2·62
73	6	1	7·08	5·99	4·42	2·65
73⅛	6	1⅛	7·09	6·	4·43	2·66
74	6	2	7·18	6·07	4·48	2·69
75	6	3	7·27	6·15	4·54	2·73
76	6	4	7·37	6·23	4·60	2·76
77	6	5	7·47	6·32	4·66	2·80
78	6	6	7·56	6·40	4·73	2·84
79	6	7	7·66	6·48	4·79	2·87

Super. Feet of 1 Inch.	Cubic Feet.	Cubic In.	Christiania Standards.	Drammen Standards.	Petersburg Standards.	Quebec Standards.
80	6	8	7·76	6·56	4·85	2·91
81	6	9	7·85	6·65	4·91	2·95
82	6	10	7·95	6·73	4·97	2·98
82½	6	10½	8·00	6·77	5·00	3·00
83	6	11	8·05	6·81	5·03	3·02
84	7	0	8·15	6·89	5·09	3·05
85	7	1	8·24	6·97	5·15	3·09
85 5/16	7	1 5/16	8·27	7·00	5·17	3·10
86	7	2	8·34	7·06	5·21	3·13
87	7	3	8·44	7·14	5·27	3·16
88	7	4	8·53	7·22	5·33	3·20
89	7	5	8·63	7·30	5·39	3·24
90	7	6	8·73	7·39	5·45	3·27
91	7	7	8·82	7·47	5·51	3·31
92	7	8	8·92	7·55	5·58	3·35
93	7	9	9·02	7·63	5·64	3·38
94	7	10	9·12	7·71	5·70	3·42
95	7	11	9·21	7·79	5·76	3·46
96	8	0	9·31	7·88	5·82	3·49
97	8	1	9·41	7·96	5·88	3·53
97½	8	1½	9·45	8·00	5·91	3·54
98	8	2	9·50	8·04	5·94	3·56
99	8	3	9·60	8·12	6·00	3·60
100	8	4	9·70	8·21	6·06	3·64
101	8	5	9·79	8·29	6·12	3·67
102	8	6	9·89	8·37	6·18	3·71
103	8	7	9·99	8·45	6·24	3·75
104	8	8	10·08	8·53	6·30	3·78
105	8	9	10·18	8·61	6·36	3·82
106	8	10	10·28	8·70	6·42	3·85
107	8	11	10·38	8·78	6·49	3·89
108	9	0	10·47	8·86	6·55	3·93
109	9	1	10·57	8·94	6·61	3·96
109 11/16	9	1 11/16	10·64	9·00	6·65	3·98
110	9	2	10·67	9·03	6·67	4·00
111	9	3	10·77	9·11	6·73	4·04
112	9	4	10·86	9·19	6·79	4·07
113	9	5	10·96	9·27	6·85	4·11
114	9	6	11·05	9·35	6·91	4·15
115	9	7	11·15	9·43	6·97	4·18
115½	9	7½	11·20	9·48	7·00	4·20
116	9	8	11·25	9·52	7·03	4·22
117	9	9	11·35	9·60	7·09	4·25
118	9	10	11·44	9·68	7·15	4·29
119	9	11	11·54	9·76	7·21	4·33

Super. Feet of 1 Inch.	Cubic Feet.	In.	Christiania Standards.	Drammen Standards.	Petersburg Standards.	Quebec Standards.
120	10	0	11·64	9·84	7·27	4·36
121	10	1	11·73	9·92	7·33	4·40
121⅞	10	1⅞	11·82	10·00	7·38	4·43
122	10	2	11·83	10·01	7·39	4·44
123	10	3	11·93	10·09	7·45	4·47
124	10	4	12·02	10·17	7·51	4·50
125	10	5	12·12	10·26	7·57	4·55
126	10	6	12·22	10·34	7·63	4·58
127	10	7	12·32	10·42	7·70	4·62
128	10	8	12·41	10·50	7·76	4·66
129	10	9	12·51	10·58	7·82	4·70
130	10	10	12·61	10·66	7·88	4·73
131	10	11	12·70	10·75	7·94	4·76
132	11	0	12·80	10·83	8·00	4·80
133	11	1	12·89	10·91	8·06	4·84
134	11	2	12·99	10·98	8·12	4·88
134 1/16	11	2 1/16	13·00	11·00	8·13	4·88
135	11	3	13·09	11·07	8·18	4·91
136	11	4	13·19	11·16	8·24	4·95
137	11	5	13·28	11·24	8·30	4·98
137½	11	5½	13·33	11·28	8·33	5·00
138	11	6	13·38	11·32	8·36	5·02
139	11	7	13·48	11·41	8·42	5·05
140	11	8	13·58	11·49	8·48	5·09
141	11	9	13·67	11·57	8·55	5·13
142	11	10	13·77	11·65	8·61	5·16
143	11	11	13·87	11·73	8·67	5·20
144	12	0	13·96	11·82	8·73	5·24
145	12	1	14·06	11·89	8·79	5·27
146	12	2	14·16	11·97	8·85	5·31
146¼	12	2¼	14·18	12·00	8·86	5·32
147	12	3	14·25	12·06	8·91	5·35
148	12	4	14·35	12·14	8·97	5·38
148½	12	4½	14·40	12·18	9·00	5·40
149	12	5	14 45	12·22	9·03	5·42
150	12	6	14·55	12·31	9·09	5·45
151	12	7	14·64	12·39	9·15	5·49
152	12	8	14·74	12·47	9·21	5·53
153	12	9	14·84	12·55	9·27	5·56
154	12	10	14·93	12·64	9·33	5·60
155	12	11	15·03	12·72	9·39	5·64
156	13	0	15·13	12·80	9·45	5·67
157	13	1	15 22	12·88	9·51	5·71
158	13	2	15·32	12·96	9·57	5·75
158 7/16	13	2 7/16	15·36	13·00	9·60	5·76

Super. Feet of 1 Inch.	Cubic Feet.	Cubic In.	Christiania Standards.	Drammen Standards.	Petersburg Standards.	Quebec Standards.
159	13	3	15·42	13·05	9·64	5·78
160	13	4	15·51	13·13	9·70	5·82
161	13	5	15·61	13·21	9·76	5·85
162	13	6	15·71	13·29	9·82	5·88
163	13	7	15·81	13·37	9·88	5·92
164	13	8	15·90	13·46	9·94	5·96
165	13	9	16·00	13·54	10·00	6·00
166	13	10	16·10	13·62	10·06	6·04
167	13	11	16·20	13·70	10·12	6·07
168	14	0	16·29	13·78	10·18	6·11
169	14	1	16·39	13·87	10·24	6·15
170	14	2	16·48	13·95	10·30	6·18
170⅝	14	2⅝	16·55	14·00	10·34	6·20
171	14	3	16·58	14·03	10·36	6·22
172	14	4	16·68	14·11	10·42	6·25
173	14	5	16·78	14·19	10·48	6·29
174	14	6	16·87	14·28	10·55	6·33
175	14	7	16·97	14·36	10·61	6·36
176	14	8	17·07	14·44	10·67	6·40
177	14	9	17·16	14·52	10·73	6·44
178	14	10	17·26	14·60	10·79	6·47
179	14	11	17·36	14·69	10·85	6·51
180	15	0	17·45	14·77	10·91	6·54
181	15	1	17·55	14·85	10·97	6·58
181½	15	1½	17·60	14·89	11·00	6·60
182	15	2	17·65	14·93	11·03	6·62
182 13/16	15	2 13/16	17·73	15·00	11·08	6·65
183	15	3	17·75	15·02	11·09	6·66
184	15	4	17·84	15·10	11·15	6·69
185	15	5	17·94	15·18	11·21	6·73
186	15	6	18·04	15·26	11·28	6·76
187	15	7	18·13	15·34	11·34	6·80
188	15	8	18·23	15·43	11·40	6·84
189	15	9	18·33	15·51	11·45	6·87
190	15	10	18·42	15·59	11·51	6·91
191	15	11	18·52	15·67	11·57	6·94
192	16	0	18·62	15·75	11·64	6·98
192½	16	0½	18·67	15·79	11·67	7·00
193	16	1	18·72	15·84	11·70	7·02
194	16	2	18·81	15·92	11·76	7·05
195	16	3	18·91	16·00	11·82	7·09
196	16	4	19·01	16·08	11·88	7·13
197	16	5	19·10	16·16	11·94	7·16
198	16	6	19·20	16·25	12·00	7·20
199	16	7	19·30	16·33	12·06	7·24

Super. Feet of 1 Inch.	Cubic Feet.	Cubic In.	Christiania Standards.	Drammen Standards.	Petersburg Standards.	Quebec Standards.
200	16	8	19·39	16·41	12·12	7·27
201	16	9	19·49	16·49	12·18	7·31
202	16	10	19·59	16·57	12·24	7·35
203	16	11	19·69	16·66	12·30	7·38
204	17	0	19·78	16·74	12·36	7·42
205	17	1	19·88	16·82	12·42	7·45
206	17	2	19·98	16·90	12·48	7·49
207	17	3	20·07	16·98	12·54	7·53
207 3/16	17	3 3/16	20·09	17·00	12·56	7·54
208	17	4	20·17	17·07	12·61	7·56
209	17	5	20·27	17·15	12·67	7·60
210	17	6	20·36	17·23	12·73	7·64
211	17	7	20·46	17·31	12·79	7·67
212	17	8	20·56	17·39	12·85	7·71
213	17	9	20·65	17·48	12·91	7·74
214	17	10	20·75	17·56	12·97	7·78
214 1/2	17	10 1/2	20·80	17·60	13·00	7·80
215	17	11	20·85	17·64	13·03	7·82
216	18	0	20·95	17·72	13·09	7·85
217	18	1	21·04	17·80	13·15	7·89
218	18	2	21·14	17·89	13·21	7·93
219	18	3	21·24	17·97	13·27	7·96
219 3/8	18	3 3/8	21·27	18·00	13·30	7·98
220	18	4	21·33	18·05	13·33	8·00
221	18	5	21·43	18·13	13·39	8·04
222	18	6	21·53	18·22	13·45	8·07
223	18	7	21·62	18·30	13·51	8·11
224	18	8	21·72	18·38	13·57	8·15
225	18	9	21·82	18·46	13·64	8·18
226	18	10	21·92	18·54	13·70	8·22
227	18	11	22·01	18·62	13·76	8·25
228	19	0	22·11	18·70	13·82	8·29
229	19	1	22·21	18·78	13·88	8·33
230	19	2	22·30	18·87	13·94	8·36
231	19	3	22·40	18·95	14·00	8·40
231 9/16	19	3 9/16	22·45	19·00	14·03	8·42
232	19	4	22·50	19·04	14·06	8·44
233	19	5	22·59	19·12	14·12	8·47
234	19	6	22·69	19·20	14·18	8·51
235	19	7	22·79	19·28	14·24	8·55
236	19	8	22·88	19·36	14·30	8·58
237	19	9	22·98	19·44	14·36	8·62
238	19	10	23·08	19·53	14·42	8·65
239	19	11	23·18	19·61	14·48	8·69
240	20	0	23·27	19·69	14·55	8·73

Super. Feet of 1 Inch.	Cubic Feet.	Cubic In.	Christiania Standards.	Drammen Standards.	Petersburg Standards.	Quebec Standards.
241	20	1	23·37	19·77	14·61	8·76
242	20	2	23·47	19·86	14·67	8·80
243	20	3	23·56	19·94	14·73	8·84
243¾	20	3¾	23·64	20·00	14·77	8·86
244	20	4	23·66	20·02	14·79	8·87
245	20	5	23·76	20·10	14·85	8·91
246	20	6	23·85	20·18	14·91	8·95
247	20	7	23·95	20·27	14·97	8·98
247½	20	7½	24·00	20·31	15·00	9·00
248	20	8	24·05	20·35	15·03	9·02
249	20	9	24·15	20·43	15·09	9·06
250	20	10	24·24	20·51	15·15	9·10
251	20	11	24·34	20·59	15·21	9·13
252	21	0	24·44	20·68	15·27	9·16
253	21	1	24·53	20·76	15·33	9·20
254	21	2	24·63	20·84	15·39	9·20
255	21	3	24·73	20·92	15·45	9·27
255 5/16	21	3 5/16	24·75	21·00	15·51	9·30
256	21	4	24·82	21·01	15·52	9·31
257	21	5	24·92	21·09	15·58	9·35
258	21	6	25·02	21·17	15·64	9·38
259	21	7	25·12	21·25	15·70	9·42
260	21	8	25·21	21·33	15·76	9·45
261	21	9	25·31	21·41	15·82	9·49
262	21	10	25·41	21·49	15·88	9·53
263	21	11	25·50	21·58	15·94	9·56
264	22	0	25·60	21·66	16·00	9·60
265	22	1	25·70	21·74	16·06	9·64
266	22	2	25·79	21·83	16·12	9·67
267	22	3	25·89	21·91	16·18	9·71
268	22	4	25·99	21·99	16·24	9·74
268½	22	4½	26·00	22·00	16·25	9·75
269	22	5	26·08	22·07	16·30	9·78
270	22	6	26·18	22·15	16·36	9·81
271	22	7	26·28	22·23	16·42	9·85
272	22	8	26·38	22·32	16·48	9·89
273	22	9	26·47	22·40	16·55	9·93
274	22	10	26·57	22·48	16·60	9·96
275	22	11	26·66	22·56	16·66	10·00
276	23	0	26·76	22·65	16·73	10·04
277	23	1	26·86	22·73	16·79	10·07
278	23	2	26·95	22·81	16·85	10·11
279	23	3	27·05	22·89	16·91	10·15
280	23	4	27·15	22·97	16·97	10·18
280 5/16	23	4 5/16	27·18	23·00	16·99	10·19

Super. Feet of 1 Inch.	Cubic Feet.	Cubic In.	Christiania Standards.	Drammen Standards.	Petersburg Standards.	Quebec Standards.
280½	23	4½	27·20	23·02	17·00	10·20
281	23	5	27·25	23·06	17·03	10·22
282	23	6	27·34	23·14	17·09	10·25
283	23	7	27·44	23·22	17·15	10·29
284	23	8	27·54	23·30	17·21	10·33
285	23	9	27·64	23·38	17·27	10·36
286	23	10	27·73	23·47	17·33	10·40
287	23	11	27·83	23·55	17·39	10·44
288	24	0	27·93	23·63	17·45	10·47
289	24	1	28·02	23·71	17·52	10·51
290	24	2	28·12	23·79	17·58	10·55
291	24	3	28·22	23·88	17·64	10·58
292	24	4	28·32	23·96	17·70	10·62
292½	24	4½	28·36	24·00	17·73	10·64
293	24	5	28·41	24·04	17·76	10·65
294	24	6	28·51	24·12	17·82	10·69
295	24	7	28·61	24·20	17·88	10·73
296	24	8	28·70	24·29	17·94	10·77
297	24	9	28·80	24·37	18·00	10·80
298	24	10	28·90	24·45	18·06	10·84
299	24	11	28·99	24·53	18·12	10·87
300	25	0	29·09	24·61	18·18	10·91
302½	25	2½	29·33	24·82	18·33	11·00
304 5/16	25	4 5/16	29·55	25·00	18·47	11·08
312	26	0	30·25	25·60	18·91	11·35
313½	26	1½	30·40	25·72	19·00	11·40
316⅞	26	4⅞	30·73	26·00	19·20	11·52
324	27	0	31·42	26·58	19·64	11·78
329	27	5	31·91	27·00	19·94	11·92
330	27	6	32·00	27·08	20·00	12·00
336	28	0	32·58	27·57	20·36	12·12
341¼	28	5¼	33·09	28·00	20·45	12·41
346½	28	10½	33·60	28·43	21·00	12·60
348	29	0	33·75	28·55	21·09	12·65
353 7/16	29	5 7/16	34·27	29·00	21·42	12·85
357½	29	9⅓	34·66	29·33	21·67	13·00
360	30	0	34·91	29·54	21·82	13·09
363	30	3	35·20	29·78	22·00	13·20
365⅝	30	5⅝	35·45	30·00	22·16	13·30
372	31	0	36·07	31·55	22·55	13·53
377 13/16	31	5 13/16	36·64	31·00	22·90	13·74
379½	31	7½	36·80	31·14	23·00	13·80
384	32	0	37·24	31·51	23·27	13·97
385	32	1	37·33	31·59	23·33	14·00
390	32	6	37·82	32·00	23·66	14·11

Super. Feet of 1 Inch.	Cubic Feet.	Cubic In.	Christiania Standards.	Drammen Standards.	Petersburg Standards.	Quebec Standards.
396	33	0	38·40	32·49	24·00	14·40
400	33	4	38·79	32·87	24·24	14·55
402 3/16	33	6 3/16	39·00	33·00	24·37	14·62
408	34	0	39·56	33·48	24·73	14·84
412½	34	4½	40·00	33·85	25·00	15·00
414 3/8	34	6 3/8	40·18	34·00	25·11	15·07
420	35	0	40·73	34·50	25·45	15·27
426 9/16	35	6 9/16	41·36	35·00	25·86	15·51
429	35	9	41·60	35·20	26·00	15·60
432	36	0	41·89	35·45	26·18	15·71
438¾	36	6¾	42·55	36·00	26·59	15·95
440	36	8	42·66	36·10	26·66	16·00
444	37	0	43·05	36·41	26·91	16·15
445½	37	1½	43·20	36·55	27·00	16·20
456	38	0	44·22	37·42	27·64	16·58
462	38	6	44·80	37·91	28·00	16·80
467½	38	11½	45·33	38·36	28·33	17·00
468	39	0	45·38	38·91	28·36	17·02
478½	39	10½	46·40	39·26	29·00	17·40
480	40	0	46·55	39·38	29·09	17·45
492	41	0	47·71	40·37	29·82	17·89
495	41	3	48·00	40·62	30·00	18·00
500	41	8	48·48	41·03	30·30	18·18
504	42	0	48·87	41·35	30·55	18·33
511½	42	7½	49·60	41·97	31·00	18·60
516	43	0	50·04	42·34	31·27	18·76
522½	43	6½	50·67	42·87	36·66	19·00
528	44	0	51·20	43·32	32·00	19·20
540	45	0	52·36	44·31	32·73	19·64
544	45	4	52·80	44·68	33·00	19·80
550	45	10	53·33	45·13	33·33	20·00
552	46	0	53·53	45·29	33·45	20·07
561	46	9	54·40	46·03	34·00	20·40
564	47	0	54·69	46·28	34·18	20·51
576	48	0	55·85	47·26	34·91	20·95
577½	48	1½	56·00	47·38	35·00	21·00
585	48	9	56·73	48·00	35·45	21·27
588	49	0	57·02	48·25	35·64	21·38
594	49	6	57·60	48·74	36·00	21·60
600	50	0	58·18	49·23	36·36	21·82
605	50	5	58·67	49·64	36·66	22·00
632½	52	8½	61·33	51·90	38·33	23·00
660	55	0	64·00	54·15	40·00	24·00
687½	57	3½	66·77	56·41	41·66	25·00
700	58	4	67·88	57·44	42·42	25·45

Super. Feet of 1 Inch.	Cubic Feet.	In.	Christiania Standards.	Drammen Standards.	Petersburg Standards.	Quebec Standards.
715	59	7	69·33	58·67	43·33	26·00
720	60	0	69·82	59·08	43·64	26·18
731½	60	11½	70·91	60·00	44·32	26·59
742½	61	10½	72·00	60·92	45·00	27·00
770	64	2	74·67	63·18	46·66	28·00
792	66	0	76·80	64·98	48·00	28·80
797½	66	5½	77·33	65·44	48·33	29·00
800	66	8	77·58	65·64	48·48	29·09
825	68	9	80·00	67·69	50·00	30·00
840	70	0	81·45	68·92	50·91	30·55
852½	71	0½	82·67	69·95	51·66	31·00
877½	73	1½	85·09	72·00	53·18	31·90
880	73	4	85·33	72·21	53·33	32·00
900	75	0	87·27	73·85	54·54	32·73
907½	75	7½	88·00	74·46	55·00	33·00
935	78	1	90·67	76·72	56·66	34·00
960	80	0	93·08	78·77	58·19	34·91
962½	80	2½	93·33	78·97	58·33	35·00
990	82	6	96·00	81·23	60·00	36·00
1000	83	4	96·97	82·05	60·61	36·36
1023¾	85	3¾	99·25	84·00	62·05	37·23
1080	90	0	104·73	88·62	65·45	39·27
1100	91	8	106·67	90·26	66·67	40·00
1170	97	6	113·45	96·00	70·91	42·55
1188	99	0	115·20	97·48	72·00	43·20
1200	100	0	116·36	98·46	72·73	43·64
1300	108	4	126·06	106·66	78·79	47·27
1316¼	109	8¼	127·64	108·00	79·77	47·86
1320	110	0	128·00	108·31	80·00	48·00
1386	115	6	134·40	113·72	84·00	50·40
1400	116	8	135·76	114·87	84·89	50·91
1440	120	0	139·64	117·64	87·27	52·36
1462½	121	10½	141·71	120·00	88·64	53·18
1560	130	0	151·27	128·00	94·55	56·73
1584	132	0	153·60	129·97	96·00	57·60
1600	133	4	155·15	131·28	96·97	58·18
1650	137	6	160·00	135·38	100·00	60·00
1680	140	0	162·91	137·85	101·82	61·09
1700	141	8	164·88	139·49	103·03	61·82
1782	148	6	172·80	146·22	108·00	64·80
1800	150	0	174·55	147·69	109·09	65·45
1900	158	4	184·24	155·90	115·16	69·09
1920	160	0	186·18	157·54	116·37	69·82
1980	165	0	192·00	162·46	120·00	72·00
2000	166	8	193·33	164·10	121·30	72·73

TABLE XXIII.

SHOWING THE VALUE OF VENEER PER FOOT OF VARIOUS THICKNESSES, CUT FROM WOOD 1 INCH THICK, AND COSTING FROM 1*s.* TO 10*s.* PER FOOT.

In the left-hand column of the Table is placed the price per foot of boards 1 inch thick from 1*s.* to 10*s.* per foot, and on the top of the other columns is the number of Veneers into which it is cut from 8 to 18, under which, and opposite any required price, in the first column is found the price of 1 foot of Veneer at any of the thicknesses required.

In the Table 1*d.* per foot is allowed for sawing, but as some sorts of wood may be charged higher, ¼*d.* or ½*d.* as the case may be, will require to be added to the price per foot of Veneer in the Table.

Fractions under 1*d.* are calculated to the nearest decimal, thus avoiding troublesome vulgar fractions; for the method of using these, reference if necessary may be made to the Treatise on Decimal Fractions in this work.

EXAMPLE.

Required the price of 45 superficial feet of Veneer, cut from wood 1 inch thick at 3*s.* 9*d.* per foot, into 16 Veneers out of the inch?

Opposite 3*s.* 9*d.* in the left-hand column, and under 16 on the top, 3·81 pence, then 3·81

Multiplied by 45

1905

1524

Divided by 12) 171·45 or 171·45 pence

14·3·45 or 14*s.* 3½*d* nearly, the price of the 45 feet.

Value per Foot of 1 in. thick.		COST OF VENEER PER FOOT.									
		8 per in.		9 per in.		10 per in.		11 per in.		12 per in.	
s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
1	0	0	2·50	0	2·33	0	2·20	0	2·09	0	2·00
1	1	0	2·63	0	2·44	0	2·30	0	2·18	0	2·08
1	2	0	2·75	0	2·56	0	2·40	0	2·27	0	2·17
1	3	0	2·88	0	2·67	0	2·50	0	2·36	0	2·25
1	4	0	3·00	0	2·78	0	2·60	0	2·45	0	2·33
1	5	0	3·13	0	2·89	0	2·70	0	2·55	0	2·42
1	6	0	3·25	0	3·00	0	2·80	0	2·64	0	2·50
1	7	0	3·38	0	3·11	0	2·90	0	2·73	0	2·58
1	8	0	3·50	0	3·22	0	3·00	0	2·82	0	2·67
1	9	0	3·63	0	3·33	0	3·10	0	2·91	0	2·75
1	10	0	3·75	0	3·44	0	3·20	0	3·00	0	2·83
1	11	0	3·88	0	3·56	0	3·30	0	3·09	0	2·92
2	0	0	4·00	0	3·67	0	3·40	0	3·18	0	3·00
2	1	0	4·13	0	3·78	0	3·50	0	3·27	0	3·08
2	2	0	4·25	0	3·89	0	3·60	0	3·36	0	3·17
2	3	0	4·38	0	4·00	0	3·70	0	3·45	0	3·25
2	4	0	4·50	0	4·11	0	3·80	0	3·55	0	3·33
2	5	0	4·63	0	4·22	0	3·90	0	3·64	0	3·42
2	6	0	4·75	0	4·33	0	4·00	0	3·73	0	3·50
2	7	0	4·88	0	4·44	0	4·10	0	3·82	0	3·58
2	8	0	5·00	0	4·56	0	4·20	0	3·91	0	3·67
2	9	0	5·13	0	4·67	0	4·30	0	4·00	0	3·75
3	0	0	5·50	0	5·00	0	4·60	0	4·27	0	4·00
3	3	0	5·88	0	5·33	0	4·90	0	4·55	0	4·25
3	6	0	6·25	0	5·67	0	5·20	0	4·82	0	4·50
3	9	0	6·63	0	6·00	0	5·50	0	5·09	0	4·75
4	0	0	7·00	0	6·33	0	5·80	0	5·36	0	5·00
4	3	0	7·38	0	6·67	0	6·10	0	5·64	0	5·25
4	6	0	7·75	0	7·00	0	6·40	0	5·91	0	5·50
4	9	0	8·13	0	7·33	0	6·70	0	6·18	0	5·75
5	0	0	8·50	0	7·67	0	7·00	0	6·45	0	6·00
5	3	0	8·88	0	8·00	0	7·30	0	6·73	0	6·25
5	6	0	9·25	0	8·33	0	7·60	0	7·00	0	6·50
5	9	0	9·63	0	8·67	0	7·90	0	7·27	0	6·75
6	0	0	10·00	0	9·00	0	8·20	0	7·55	0	7·00
6	3	0	10·38	0	9·33	0	8·50	0	7·82	0	7·25
6	6	0	10·75	0	9·67	0	8·80	0	8·09	0	7·50
6	9	0	11·13	0	10·00	0	9·10	0	8·36	0	7·75
7	0	0	11·50	0	10·33	0	9·40	0	8·64	0	8·00
7	6	1	0·25	0	11·00	0	10·00	0	9·18	0	8·50
8	0	1	1·00	0	11·67	0	10·60	0	9·73	0	9·00
8	6	1	1·75	1	0·33	0	11·20	0	10·27	0	9·50
9	0	1	2·50	1	1·00	0	11·80	0	10·82	0	10·70
9	6	1	3·25	1	1·67	1	0·40	0	11·36	0	10·50

Value per Foot of 1 in. thick.		Cost of Veneer per Foot.											
		13 per in.		14 per in.		15 per in.		16 per in.		17 per in.		18 per in.	
s.	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
1	0	0	1·92	0	1·86	0	1·80	0	1·75	0	1·71	0	1·67
1	1	0	2·00	0	1·93	0	1·87	0	1·81	0	1·76	0	1·72
1	2	0	2·08	0	2·00	0	1·93	0	1·88	0	1·82	0	1·78
1	3	0	2·15	0	2·07	0	2·00	0	1·94	0	1·88	0	1·83
1	4	0	2·23	0	2·14	0	2·07	0	2·00	0	1·94	0	1·89
1	5	0	2·31	0	2·21	0	2·13	0	2·06	0	2·00	0	1·95
1	6	0	2·38	0	2·29	0	2·20	0	2·13	0	2·06	0	2·00
1	7	0	2·46	0	2·36	0	2·27	0	2·19	0	2·12	0	2·06
1	8	0	2·54	0	2·43	0	2·33	0	2·25	0	2·18	0	2·11
1	9	0	2·62	0	2·50	0	2·40	0	2·31	0	2·24	0	2·17
1	10	0	2·69	0	2·57	0	2·47	0	2·38	0	2·29	0	2·22
1	11	0	2·77	0	2·64	0	2·53	0	2·44	0	2·35	0	2·28
2	0	0	2·85	0	2·71	0	2·60	0	2·50	0	2·41	0	2·33
2	1	0	2·92	0	2·79	0	2·67	0	2·56	0	2·47	0	2·39
2	2	0	3·00	0	2·86	0	2·73	0	2·63	0	2·53	0	2·44
2	3	0	3·08	0	2·92	0	2·80	0	2·69	0	2·59	0	2·50
2	4	0	3·15	0	3·00	0	2·87	0	2·75	0	2·65	0	2·56
2	5	0	3·23	0	3·07	0	2·93	0	2·81	0	2·71	0	2·61
2	6	0	3·31	0	3·14	0	3·00	0	2·88	0	2·76	0	2·67
2	7	0	3·38	0	3·21	0	3·07	0	2·94	0	2·82	0	2·72
2	8	0	3·46	0	3·29	0	3·13	0	3·00	0	2·88	0	2·78
2	9	0	3·54	0	3·36	0	3·20	0	3·06	0	2·94	0	2·83
3	0	0	3·77	0	3·57	0	3·40	0	3·25	0	3·12	0	3·00
3	3	0	4·00	0	3·79	0	3·60	0	3·44	0	3·29	0	3·17
3	6	0	4·23	0	4·00	0	3·80	0	3·63	0	3·47	0	3·33
3	9	0	4·46	0	4·21	0	4·00	0	3·81	0	3·65	0	3·50
4	0	0	4·69	0	4·43	0	4·20	0	4·00	0	3·82	0	3·67
4	3	0	4·92	0	4·64	0	4·40	0	4·19	0	4·00	0	3·83
4	6	0	5·15	0	4·86	0	4·60	0	4·38	0	4·18	0	4·00
4	9	0	5·38	0	5·07	0	4·80	0	4·56	0	4·35	0	4·17
5	0	0	5·62	0	5·29	0	5·00	0	4·75	0	4·53	0	4·33
5	3	0	5·85	0	5·50	0	5·20	0	4·94	0	4·71	0	4·50
5	6	0	6·08	0	5·71	0	5·40	0	5·13	0	4·88	0	4·67
5	9	0	6·31	0	5·93	0	5·60	0	5·31	0	5·06	0	4·83
6	0	0	6·54	0	6·14	0	5·80	0	5·50	0	5·24	0	5·00
6	3	0	6·77	0	6·36	0	6·00	0	5·69	0	5·41	0	5·17
6	6	0	7·00	0	6·57	0	6·20	0	5·88	0	5·59	0	5·33
6	9	0	7·23	0	6·79	0	6·40	0	6·06	0	5·76	0	5·50
7	0	0	7·46	0	7·00	0	6·60	0	6·25	0	5·94	0	5·67
7	6	0	7·92	0	7·43	0	7·00	0	6·63	0	6·29	0	6·00
8	0	0	8·38	0	7·86	0	7·40	0	7·00	0	6·65	0	6·33
8	6	0	8·85	0	8·29	0	7·80	0	7·38	0	7·00	0	6·67
9	0	0	9·31	0	8·71	0	8·20	0	7·75	0	7·35	0	7·00
9	6	0	9·77	0	9·14	0	8·60	0	8·13	0	7·71	0	7·33

TABLE XXIV.

TO FIND THE COST PER SUPERFICIAL FOOT OF BOARDS FROM ¼ INCH TO 5½ INCHES IN THICKNESS, CUT FROM LOGS AT PRICES RANGING FROM 1*s.* TO 3*s.* PER CUBIC FOOT.

In the construction of this Table, allowance is made for slabs and waste of saw-cut. On boards at and under 2 inches thick, half an inch of additional thickness is given for the slabs, and one-eighth for the saw. When the thickness of the boards exceeds 2 inches, the saw-cut only is allowed. The charge for Sawing is calculated at the uniform rate of 2*s.* 9*d.* per hundred feet, which is the general price.

EXAMPLE.

Required the cost per superficial foot of boards 2½ inches thick, cut from logs at 2*s.* 3*d.* per cubic foot.

Run down the first column till you reach 2½ inches, opposite to this, and under 2*s.* 3*d.* is 6·24 or 6¼*d.* nearly.

By the following scale the results of the Table may be corrected for sawing at any price per hundred feet. It adds or deducts, as the case may be, the difference in pence between 2*s.* 9*d.* and the given price.

If sawing is	2*s.*	per	hundred,	.	.	subtract	·09
,,	2*s.* 3*d.*	,,	.	.	,,	,,	·06
,,	2*s.* 6*d.*	,,	.	.	,,	,,	·03
,,	3*s.*	,,	.	.	add		·03
,,	3*s.* 3*d.*	,,	.	.	,,		·06
,,	3*s.* 6*d.*	,,	.	.	,,		·09
,,	3*s.* 9*d.*	,,	.	.	,,		·12
,,	4*s.*	,,	.	.	,,		·15
,,	4*s.* 3*d.*	,,	.	.	,,		·18
,,	4*s.* 6*d.*	,,	.	.	,,		·21
,,	4*s.* 9*d.*	,,	.	.	,,		·24
,,	5*s.*	,,	.	.	,,		·27
,,	5*s.* 3*d.*	,,	.	.	,,		·30
,,	5*s.* 6*d.*	,,	.	.	,,		·33

EXAMPLE.

The cost as above of 2½ inch boards by the Table is 6·24, What would the cost be, with sawing at the rate of 3*s.* 6*d.* per hundred?

Cost as per Table	6·24
Add difference in pence between 3*s.* 6*d.* and 2*s.* 9*d.*, that is 42—33= . . .	·09
	6·33 or 6⅓*d.*

TABLE XXIV.—COST OF BOARDS OF VARIOUS THICKNESSES.

Thickness.	COST PER CUBIC FOOT.													
	1s. 0d.		1s. 0½d.		1s. 1d.		1s. 1½d.		1s. 2d.		1s. 2½d.		1s. 3d.	
in.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
¼	0	0·72	0	0·73	0	0·75	0	0·77	0	0·79	0	0·80	0	0·82
5/16	0	0·85	0	0·87	0	0·89	0	0·92	0	0·94	0	0·96	0	0·98
⅜	0	0·98	0	1·01	0	1·03	0	1·06	0	1·09	0	1·11	0	1·14
7/16	0	1·11	0	1·14	0	1·17	0	1·20	0	1·24	0	1·27	0	1·31
½	0	1·24	0	1·28	0	1·32	0	1·35	0	1·39	0	1·42	0	1·47
9/16	0	1·37	0	1·42	0	1·46	0	1·50	0	1·55	0	1·59	0	1·63
1	0	1·50	0	1·55	0	1·60	0	1·65	0	1·70	0	1·75	0	1·80
1⅛	0	1·63	0	1·69	0	1·74	0	1·80	0	1·85	0	1·91	0	1·96
1¼	0	1·77	0	1·83	0	1·89	0	1·94	0	2·00	0	2·06	0	2·12
1⅜	0	1·90	0	1·97	0	2·03	0	2·10	0	2·16	0	2·22	0	2·29
1½	0	2·03	0	2·10	0	2·17	0	2·24	0	2·31	0	2·38	0	2·45
1⅝	0	2·16	0	2·24	0	2·31	0	2·49	0	2·46	0	2·54	0	2·61
1¾	0	2·29	0	2·37	0	2·45	0	2·53	0	2·61	0	2·70	0	2·78
1⅞	0	2·42	0	2·50	0	2·59	0	2·68	0	2·76	0	2·85	0	2·94
2	0	2·55	0	2·64	0	2·73	0	2·83	0	2·92	0	3·01	0	3·10
2¼	0	2·71	0	2·81	0	2·90	0	3·00	0	3·10	0	3·20	0	3·30
2½	0	2·96	0	3·07	0	3·17	0	3·28	0	3·39	0	3·50	0	3·61
2¾	0	3·21	0	3·33	0	3·45	0	3·57	0	3·69	0	3·81	0	3·93
3	0	3·46	0	3·59	0	3·72	0	3·85	0	3·98	0	4·11	0	4·24
3¼	0	3.70	0	3·84	0	3·98	0	4·12	0	4·26	0	4·40	0	4·54
3½	0	3·96	0	4·11	0	4·26	0	4·41	0	4·56	0	4·71	0	4·86
3¾	0	4·20	0	4·36	0	4·52	0	4·68	0	4·85	0	5·01	0	5·17
4	0	4·45	0	4·63	0	4·80	0	4·97	0	5·14	0	5·31	0	5·49
4¼	0	4·71	0	4·89	0	5·07	0	5·26	0	5·44	0	5·62	0	5·80
4½	0	4·96	0	5·16	0	5·35	0	5·54	0	5·74	0	5·93	0	6·12
4¾	0	5·21	0	5·41	0	5·61	0	5·82	0	6·02	0	6·22	0	6·43
5	0	5·46	0	5·67	0	5·89	0	6·10	0	6·31	0	6·53	0	6·74
5½	0	5·96	0	6·20	0	6·43	0	6·67	0	6·90	0	7·14	0	7·37

TABLE XXIV.—COST OF BOARDS OF VARIOUS THICKNESSES.

Thickness.	COST PER CUBIC FOOT.											
	1*s.* 3½*d.*		1*s.* 4*d.*		1*s.* 4½*d.*		1*s.* 5*d.*		1*s.* 5½*d.*		1*s.* 6*d.*		1*s.* 7*d.*	
in.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
¼	0	0·84	0	0·85	0	0·86	0	0·88	0	0·90	0	0·92	0	0·96
⅜	0	1·00	0	1·03	0	1·05	0	1·07	0	1·09	0	1·11	0	1·16
½	0	1·17	0	1·20	0	1·23	0	1·25	0	1·28	0	1·30	0	1·36
⅝	0	1·34	0	1·37	0	1·41	0	1·44	0	1·47	0	1·50	0	1·57
¾	0	1·51	0	1·55	0	1·59	0	1·62	0	1·66	0	1·70	0	1·78
⅞	0	1·67	0	1·72	0	1·77	0	1·82	0	1·86	0	1·90	0	1·98
1	0	1·85	0	1·90	0	1·95	0	2·00	0	2·04	0	2·09	0	2·19
1⅛	0	2·01	0	2·07	0	2·12	0	2·18	0	2·23	0	2·29	0	2·40
1¼	0	2·18	0	2·24	0	2·30	0	2·36	0	2·42	0	2·48	0	2·60
1⅜	0	2·35	0	2·42	0	2·48	0	2·55	0	2·61	0	2·68	0	2·81
1½	0	2·52	0	2·59	0	2·66	0	2·73	0	2·80	0	2·88	0	3·02
1⅝	0	2·68	0	2·77	0	2·85	0	2·92	0	3·00	0	3·07	0	3·22
1¾	0	2·86	0	2·94	0	3·02	0	3·10	0	3·18	0	3·27	0	3·43
1⅞	0	3·03	0	3·11	0	3·20	0	3·29	0	3·37	0	3·46	0	3·64
2	0	3·20	0	3·29	0	3·38	0	3·47	0	3·56	0	3·66	0	3·84
2¼	0	3·40	0	3·50	0	3·60	0	3·70	0	3·80	0	3·89	0	4·09
2½	0	3·73	0	3·84	0	3·94	0	4·05	0	4·16	0	4·27	0	4·49
2¾	0	4·05	0	4·17	0	4·29	0	4·41	0	4·53	0	4·65	0	4·89
3	0	4·37	0	4·50	0	4·63	0	4·76	0	4·89	0	5·02	0	5·28
3¼	0	4·68	0	4·82	0	4·96	0	5·10	0	5·24	0	5·39	0	5·67
3½	0	5·01	0	5·16	0	5·32	0	5·47	0	5·62	0	5·77	0	6·07
3¾	0	5·33	0	5·49	0	5·65	0	5·81	0	5·98	0	6·14	0	6·46
4	0	5·66	0	5·83	0	6·00	0	6·17	0	6·34	0	6·52	0	6·86
4¼	0	5·99	0	6·17	0	6·35	0	6·53	0	6·71	0	6·90	0	7·26
4½	0	6·31	0	6·51	0	6·70	0	6·89	0	7·09	0	7·28	0	7·67
4¾	0	6·63	0	6·83	0	7·04	0	7·24	0	7·44	0	7·65	0	8·05
5	0	6·95	0	7·17	0	7·38	0	7·59	0	7·81	0	8·02	0	8·45
5½	0	7.61	0	7·84	0	8·08	0	8·31	0	8·55	0	8·78	0	9·25

TABLE XXIV.—COST OF BOARDS OF VARIOUS THICKNESSES.

Thickness.	COST PER CUBIC FOOT.											
	1*s.* 8*d.*		1*s.* 9*d.*		1*s.* 10*d.*		1*s.* 11*d.*		2*s.* 0*d.*		2*s.* 1*d.*	
in.	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*	*s.*	*d.*
1/8	0	0·98	0	1·01	0	1·04	0	1·07	0	1·11	0	1·14
3/16	0	1·20	0	1·24	0	1·29	0	1·33	0	1·37	0	1·42
1/4	0	1·41	0	1·47	0	1·53	0	1·58	0	1·63	0	1.68
5/16	0	1·63	0	1·70	0	1·77	0	1·83	0	1·90	0	1·96
3/8	0	1·85	0	1·93	0	2·00	0	2·08	0	2·16	0	2·23
7/16	0	2·07	0	2·16	0	2·24	0	2·33	0	2·42	0	2·50
1	0	2·29	0	2·39	0	2·48	0	2·58	0	2·68	0	2·78
1 1/16	0	2·50	0	2·61	0	2·72	0	2·83	0	2·94	0	3·05
1 1/8	0	2·72	0	2·84	0	2·95	0	3·08	0	3·20	0	3·32
1 3/16	0	2·94	0	3·07	0	3·20	0	3·33	0	3·46	0	3·59
1 1/4	0	3·16	0	3·30	0	3·44	0	3·58	0	3·72	0	3·86
1 5/16	0	3·37	0	3·53	0	3·68	0	3·83	0	3·98	0	4·14
1 3/8	0	3·59	0	3·76	0	3·92	0	4·08	0	4·24	0	4·41
1 7/16	0	3·81	0	3·98	0	4·16	0	4·33	0	4·50	0	4·68
2	0	4·03	0	4·21	0	4·40	0	4·58	0	4·77	0	4·95
2 1/4	0	4·29	0	4·49	0	4·69	0	4·88	0	5·08	0	5·28
2 1/2	0	4·71	0	4·93	0	5·14	0	5·36	0	5·58	0	5·80
2 3/4	0	5·13	0	5·37	0	5·61	0	5·85	0	6·09	0	6·33
3	0	5·54	0	5·80	0	6·06	0	6·32	0	6·58	0	6·84
3 1/4	0	5·95	0	6·23	0	6·51	0	6·79	0	7·07	0	7·35
3 1/2	0	6·37	0	6·67	0	6·98	0	7·28	0	7·58	0	7·88
3 3/4	0	6·78	0	7·10	0	7·42	0	7·75	0	8·07	0	8·39
4	0	7·20	0	7·55	0	7·89	0	8·23	0	8·58	0	8·92
4 1/4	0	7·63	0	7·99	0	8·36	0	8·72	0	9·09	0	9·45
4 1/2	0	8·05	0	8·44	0	8·82	0	9·21	0	9·59	0	9·98
4 3/4	0	8·46	0	8·87	0	9·27	0	9·68	0	10·08	0	10·49
5	0	8·88	0	9·31	0	9·73	0	10·16	0	10·59	0	11·01
5 1/2	0	9·72	0	10·19	0	10·66	0	11·13	0	11·60	0	0·07

TABLE XXIV.—COST OF BOARDS OF VARIOUS THICKNESSES.

Thickness.	COST PER CUBIC FOOT.											
	2s. 2d.		2s. 3d.		2s. 4d.		2s. 6d.		2s. 9d.		3s. 0d.	
in.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
1/4	0	1·17	0	1·20	0	1·24	0	1·30	0	1·40	0	1·50
5/16	0	1·46	0	1·50	0	1·55	0	1·63	0	1·77	0	1·90
3/8	0	1·73	0	1·79	0	1·85	0	1·96	0	2·12	0	2·29
7/16	0	2·03	0	2·09	0	2·16	0	2·29	0	2·48	0	2·68
1/2	0	2·31	0	2·38	0	2·46	0	2·61	0	2·84	0	3·07
9/16	0	2·59	0	2·68	0	2·77	0	2·94	0	3·20	0	3·46
1	0	2·87	0	2·97	0	3·07	0	3·27	0	3·56	0	3·85
1 1/16	0	3·16	0	3·27	0	3·37	0	3·59	0	3·92	0	4·24
1 1/8	0	3·44	0	3·56	0	3·68	0	3·92	0	4·28	0	4·64
1 3/16	0	3·72	0	3·85	0	3·99	0	4·25	0	4·64	0	5·03
1 1/4	0	4·01	0	4·15	0	4·29	0	4·57	0	5·00	0	5·42
1 5/16	0	4·29	0	4·44	0	4·59	0	4·90	0	5·35	0	5·81
1 3/8	0	4·57	0	4·73	0	4·90	0	5·22	0	5·71	0	6·20
1 7/16	0	4·85	0	5·02	0	5·20	0	5·55	0	6·07	0	6·59
2	0	5·14	0	5·32	0	5·51	0	5·88	0	6·43	0	6·98
2 1/4	0	5·48	0	5·68	0	5·87	0	6·27	0	6·86	0	7·46
2 1/2	0	6·02	0	6·24	0	6·46	0	6·89	0	7·55	0	8·21
2 3/4	0	6·57	0	6·80	0	7·04	0	7·52	0	8·24	0	8·96
3	0	7·10	0	7·36	0	7·62	0	8·14	0	8·92	0	9·71
3 1/4	0	7·63	0	7·91	0	8·20	0	8·76	0	9·60	0	10·44
3 1/2	0	8·18	0	8·49	0	8·79	0	9·39	0	10·30	0	11·21
3 3/4	0	8·72	0	9·04	0	9·36	0	10·01	0	10·97	0	11·95
4	0	9·26	0	9·61	0	9·95	0	10·64	0	11·67	1	0 70
4 1/4	0	9·82	0	10·18	0	10·55	0	11·28	1	0·37	1	1 47
4 1/2	0	10·36	0	10·75	0	11·14	0	11·91	1	1·07	1	2·23
4 3/4	0	10·89	0	11·30	0	11·71	1	0·52	1	1·74	1	2·96
5	0	11·44	0	11·87	1	0·30	1	1·15	1	2·43	1	3·71
5 1/2	1	0·54	1	1·01	1	1·48	1	2·41	1	3·82	1	5·23

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